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L. X

LECTURES

ON THE

MATERIA MEDICA:

CONTAINING

The NATURAL HISTORY of DRUGS,

THEIR VIRTUES AND DOSES:

ALSO

DIRECTIONS for the Study of the MATERIA MEDICA;

AND

An APPENDIX on the METHOD of PRESCRIBING.

Publiſhed from the MANUSCRIPT of

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Profeſſor of BOTANY and the MATERIA MEDICA in the Univerſity of EDINBURGH,

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LECTURES

ON THE

MATERIA MEDICA.

LECTURE XLVI.

Of the MEDICINAL CORTICES.

AURANTIORUM, *Vide* Mala Citrea.
BERBERIS, *Vide* Baccæ Berberis.
CINNAMOMUM.

SECT. I.

CINNAMOMUM, & canella off. cinnamomum, ſive canella Zeylanica, *C. B.* & aliorum. Laurus Zeylanica; baccis calyculatis. *Herman. R. H.* 1561. Cinnamomum, ſive canella Zeylanica. *B. P.* 408. Canella, ſeu cinnamomum vulgare. *J. B.* i. 446. Canella. *Garc. Cluſ.* ex. 168. *Ger.* 1532. Cinnamomum. *Park.* 1579. Caſſia, cinnamomea. *H. L.* 129. Canella, quæ Cuurdo. *Piſon. Mant. Arom.* 165. Cinnamomum, offic. *Dale.* 299. Laurus, foliis oblongo-ovatis, trinerviis, nitidis, planis. *H. Cliff.* 154. Cinnamon, and cinnamon-tree of Ceylon.

" It grows in the woods of Ceylon as common, and as little eſteemed by " the natives, who call it Corunda Gauhah, as the hazel with us. It is not " a great, but a ſizeable tree. The cinnamon on the tree looks whitiſh. " They ſcrape it, pull it off, and dry it in the ſun. They take it only from " the ſmaller trees, although the bark of the greater is as ſweet to the ſmell, " and as ſtrong to the taſte. The wood has no ſmell, is white and ſoft like " fir. The leaf reſembles much the laurel, both in colour and thickneſs; " but whereas the laurel hath but one rib, the cinnamon hath three. When " the young leaves come out, they look red like ſcarlet; broken or bruiſed, " they ſmell more like cloves than cinnamon. It bears a fruit, which is ripe " in September, much like an acorn, but ſmaller: it neither taſtes nor ſmells " much like the bark, but being boiled in water, it yields an oil ſwimming " on the top, which when cold is as hard as tallow and as white, and ſmells " excellently well. They uſe it for ointments for aches and pains, and to

" burn in lamps : but they make no candles of it ; neither are candles uſed " by any but the king." Thus Knox. See *An hiſtorical relation of the iſland of Ceylon in the Eaſt Indies. By Robert Knox, a captive there near twenty years. London*, 1681. in folio. " That it may be the beſt cinnamon, the tree ought " neither to be too young nor too old, and that it be only the middle bark." *Ribeyro. Harris Col.* ii. 456.

" The Dutch having, anno 1657, made themſelves maſters of Ceylon, by " driving thence the Portugueſe, (who for more than 100 years monopolized " the cinnamon trade), and having in 1661 deſtroyed the cinnamon-trees of " Cochin, though but a wild kind, all the cinnamon conſumed in Europe " comes from Holland. It is ſold at Amſterdam at between forty and ſixty " ſtivers per pound." Vid. *Savary Dict.* i. 531. 973. & iii. 144.

N. B. " Caſſia cinamomea aliquoties a me ex Zeylan in Belgiam tranſmiſſa, " viguit in horto Bentingiano, Beverningiano & noſtro ad ſecundum, ter- " tiumve annum, quo incidente bruma rigidiori interiit." *H. L.* 130. " Ar- " bor hæc vetita, Europæ Oras ſalutavit nunquam ; nec hortis noſtris grata " fuit unquam hoſpes, nec facile erit ullius." *H. Cliff.* 154. It is a ſpecies of the laurus, as are alſo ſaſſafras, benzoin, camphora, but carries both flowers and fruit, or is an hermaphrodite, and does not ſpecifically differ from the caſſia lignea tree, which is accurately deſcribed and figured by the name Carua, in *H. Mal.* tom. i. p. 107. tab. 59. It is Kurundu Zeylanenſibus. *H. L.* 130.

Cinnamon is a thin, light, reddiſh-brown bark, rolled up in long quills, of a pleaſant, biting, aromatic ſweet taſte, and fragrant delightful ſmell. " Sa- " poris acri, pungente, ſuavi, ſubdulci, & aromatico, cum blando lentore in " receſſu, præcipue ſi recens ſit ; odore fragrantiſſimo." *Herm. M. S.* " Sa- " pore acuto, aromatico, acri, dulci ; odore fragrantiſſimo & ſuavi." *Albin. M. S.* " Of a delightful aromatic ſmell, and a pleaſant, ſweet, biting taſte." *Miller Bot.* p. 139. " Sapore acri pungente, ſed ſine moleſtia ; ſubdulci & " aromatico gratiſſimo ; odore ſuavi & fragrantiſſimo." *Geoff.* ii. 164.

2. Canella Malabarica, Xylocaſſia, & caſſia lignea. Off. cinamomum (cinnamomum) ſive canella Malabarica & Javanenſis. *B. P.* 409. (*R. H.* 1560.) Caſſia lignea officinarum. *Park.* 1580. C. lignea fuſca ; aromatici & glutinoſi ſaporis, *J. B.* i. 455. C. vulgaris, Calihacha dicta. *Piſ. M. Arom.* 165. Arbor canellifera Malabarica ; cortice ignobiliore, cujus folium Malabathrum officinarum. *Breyn. Prod.* ii. p. 18. Caſſia lignea, Offic. *Dale.* 299. Carua. *H. Mal.* tom. i. p. 107. tab. 59. (57. *H. Cliff.*) Caſſia Malabarica. *H. L.* 130. The cinnamon-tree of Malabar, and Malabar cinnamon, or caſſia lignea, omitted in the *London M. M.*

" Cinamomum luxuriat in inſula Zeylan ; caſſia lignea in Malabara, Su- " matra, Java, & Fran. Hernande teſte in inſulis Philippinis. Caſſia vero " Malabarica, cum in *H. M.* tom. i. p. 107. Nomine Caruæ, accuratiſſime " deſcribitur, & a Zeylanica tantum acrimonia, ſuavitate, & virtutis præſtan- " tia, neutiquam facie, modove creſcendi diſcriminatur.—Supervacaneum " duxi hujus deſcriptionem hic apponere." *H. L.* 130. Some ſay that the Malabar cinnamon, tranſplanted into Ceylon, turns true cinnamon, as if all the difference were owing to the *locus natalis*." " J. B. ſcribit caſſiam lig- " neam, ſaporem ſuum aromaticum (qui in cinnamomo paulatim evaneſcit)

" con-

" conſervaſſe etiam poſt 30 annos : & Ja. Breynius utramque harum (caſſiam " ligneam, & canellam,) peculiarem arborem agnoſcere, ſe dilucide demon- " ſtraturum (*Ep. Germ.* an. 4. obſ. 130.) promittit." *R. H.* p. 1560. But he has not done it yet.

The caſſia lignea is commonly thicker, harder and browner than cinnamon, of a weaker taſte and ſmell; not fibrous when chewed, but diſſolving as it were into a ſort of mucilage, or ſweet glutinous ſubſtance. " We have two " or three ſorts of caſſia lignea in the druggiſts ſhops; whereof the quill ſort, " which is of the colour of cinnamon, and rolled up like it, but in leſſer " quills, is moſt eſteemed. There is another ſort, which is thicker, and not " ſo curled up, but breaking blackiſh, and as it were reſinous, of a ſtrong " and biting taſte, which is likewiſe very good. The beſt is what comes " neareſt to cinnamon in ſmell, with a glutinous ſweetneſs in taſte." *Miller Bot.* 121. " Eſt craſſior cinnamomo, compactior & durior; eſt mucilagi- " noſa, ita ut dentibus comminuta, nulla fere parte lignea ſuperſtite, liqueſ- " cat: cinnamomum vero, licet diligenter maſticetur, ori pertinaciter adhæret. " Imbecilior eſt cinnamomo odore & ſapore." *Albin. M. S.*

3. Malabathrum, folium, folium Indum. Off. Tamalapatrum, ſive folium; cadegi Indi (*i. e.* folium Indum) Arabibus. *B. P.* 409. Malabathrum, & folium Indum officinarum. *J. B.* i. 430. *R. H.* 1563. Folium Indum. *Garc. Cluſ. ex* 177. Tamalapatra. *Ger.* 1534. Folium Indum, ſive Malabathrum. *Park.* 1585—1. *Dale*, 299. The Indian leaf.

It is a large laurel-like leaf, more pointed at each end, with three notable ribs running lengthways, of a yellowiſh green colour, and hot aromatic taſte, with the flavour of cloves.

It is the leaf of the canella ſylveſtris Malabarica. *R. H.* 1562. Katou-Karua. *H. Mal.* v. 105. tab. 53. According to *Dale*, l. c. and *Geoff.* ii. 265. that is the great wild cinnamon-tree of the mountains, the leaves whereof are very large. It is the leaf of the cinamomum, ſive canella Malabarica & Javanenſis. *B. P.* according to the *New London Diſpenſatory.*

" They are generally believed to be the leaves of the caſſia lignea, or cin- " namon-tree, or both; for upon comparing them with leaves of the true " cinnamon, of which I have a branch, I can find very little difference, ei- " ther in ſhape or colour, ſmell or taſte. How far the leaves of the canella " Malabarica, which are eſteemed to be the true folia Inda, differ from theſe, " is uncertain, ſince they are never brought to us, theſe ſupplying their " place, and I queſtion not but to as good purpoſe. They are ſeldom uſed " now, mace being appointed in our Diſpenſatories in their ſtead." *Miller Bot.* 202.

It is uncertain what the μαλαβαθρον, *Dioſcor.* l. 1. c. 11. p. 11. was. Garcias thinks it the tamalapatra. " Appellant autem, ſays he, Indi folium ta- " malapatra, quam vocem Græci & Latini imitantes, corrupte Malabatrum " nuncuparunt. Arabes Cadegi Indi, *i. e.* folium Indum dicunt." *Cluſ. ex.* 177. If you want more of this, you may conſult *C. Hoffman*, p. 323. *Bod. in Theophr.* p. 1032. *J. B*, i. 430—435. *R. H.* &c.

Cinnamomum, κιννάμωμον, Scaliger (*Not. in Garz.*) derives from the Hebrew *Kinamon*; and Nicander, in Theriacis, writes it κιννάμον, and Ovid Cinnamum. " Dicunt aves magnas has ferre feſtucas, quas nos petentes à

" Phœnicibus cinnamomum vocamus. Herodot. Aiunt etiam cinnamomum " avem eſſe ex locis illis, eamque aliunde ferre, quod cinnamomum vocant, " ex eo ſibi nidum ædificare, ſummis arborum ramis impoſitum. Incolas " apto ad ſagittas plumbo dejicere, atque ita ex congeſto colligere cinnamo- " mum." *Ariſtot. Hiſt. Animal.* l. 9. c. 13. p. 711. That it was found in any bird's neſt, or grew in marſhes guarded by wild and noxious animals, &c. are reckoned fables by *Pliny*, l. 12. c. 19. p. 311. Vid. *Bod. in Theoph.* p. 984.

Whether the cinnamon of the ancients and of the moderns is the ſame thing; and if not, what their cinnamon was, I ſhall leave to others to determine. When you read Dioſcorides, l. 1. c. 13. p. 12. and Pliny, l. 12. c. 19. p. 311. you will ſee that none of the conjectures of the learned are very well founded, " Quoniam fabuloſa, varia et incerta ſunt, quæ de cinna- " momo et caſſia, a veteribus Græcis et Latinis traduntur, ego potius in " Garciæ, Monardis, Scaligeri et Amati ſententiam propendeo, veterum ſcilicet " et recentiorum cinnamomum, necnon caſſiam eorundem, unam et eandem " rem eſſe." *R. H.* 1559. The uſe made of them perhaps preſerving both name and memory; which is as probable as Dodonæus and Bodæus-a-Stapel their opinion, who think that the ſmall branches of the carophyllus aromaticus, which are ſometimes brought among the cloves, are the cinnamon antiquorum.

Garcias ſays, the bark peeled off grows again in two or three years. Mr. Geoffroy, ii. 166. aſſerts it, though it does not ſeem very probable. Vid. *Garc. Cluſ. ex.* 170. & *R. H.*

SECT. II.

Cinnamon is the moſt agreeably ſtimulating of all the aromatics. It warms and comforts the ſtomach, chears the ſpirits, promotes perſpiration, and expels wind: is called cordial, cephalic, ſtomachic and uterine; and commended in lowneſs of ſpirits, lipothymies, want of appetite, cholics, hard labour, obſtructione menſium et lochiorum; in a word, in all cold and phlegmatic diſtempers, *et ubicunque natura languet.*

Caſſia lignea is of the ſame nature with the cinnamon, but much weaker; is ſaid to be more aſtringent, and good in all ſort of fluxes,—ſine ratione.

The Indian leaf ſeems to partake of the virtues of the caſſia and cloves; ſo is a ſtimulating aromatic diaphoretic. But it is uſed only in the mithridatium and theriaca, in which the *London Diſpenſatory* allows mace to be taken for it.

" Cinnamomum calfacit et ſiccat, aperit, diſcutit, menſes et partum acce- " lerat; omnia viſcera, ſpirituſque ſingulos recreat; concoctiones juvat: hinc " uſus ejus frequentiſſimus eſt in virium imbecilitate, lipothymia, capitis, ven- " triculi et uteri affectibus frigidioribus. Præp. ſunt, 1. Confectio. 2. Aqua. " 3. Tinctura. 4. Elixir. 5. Oleum. 6. Sal. 7. Balſamum. 8. Syrupus. " 9. Magiſterium. 10. Species Diacinamomi." *Schroder.* p. 567.

" Folia iiſdem facultatibus pollent, quibus ſpica nardi, ſed fortioribus: " urinam potenter movent." *Schroder.* 619. " Malabathrum eaſdem cum

" nardo vires ſortitur, ſed illud efficacius omnia præſtat: attamen Mala-
" bathrum et urinas ciendi majore vi pollet, et ſtomacho convenientius
" eſt," &c. *Dioſcor.* l. 1. c. 11. p. 11.

For, 1. Cinnamon is ſo agreeable to every palate that it is as much uſed for its taſte and flavour, as for its virtues, on account of which however it may be called the prince of ſpiceries or aromatics.—2. Its ſpecific virtues are lodged in a moſt ſubtile penetrating, hot, even cauſtic, heavy eſſential oil. This oil bears but a ſmall proportion to the bark itſelf, or to the other principles it contains. " Cinnamomi libra una, dat olei ʒij. vel ʒijſß." *Schroder.* But Lemery ſays ℔j. of the beſt cinnamon will ſcarce yield ol. eſſen. ʒjſß. (*Chym.* p. 588.) and according to Sala and Hoffman, ſcarcely ʒj. (*Rieger. Intr.* ii. 893.) And yet this oil, in an open wide-mouth'd glaſs veſſel, will perfume the air indeed all round it with the ſmell of cinnamon. " Interim oleo ſic expoſito,
" perit omnis ſingularis virtus, brevique reſtat pondere idem ferme priori
" oleum, at exhauſtum penitus, veteriſque egenum virtutis." Vide *Boerhaave*, ch. i. p. 76. Beſides the cinnamon water with which the oil riſes, expoſed to the air, ſuffers the ſame change. " Brevi aqua tibi ſuperſtes erit iners, ne-
" que dotes miras ſui exhibet aromatis; cæterum haud deprehendes pondus
" ejus magis diminutum, quam quod de ſimplici aqua communi, æquali ex
" vaſe, eodem exhalaviſſet loco, inter tempus idem." *B. Ibid.* While the cinnamon, remaining after diſtillation, dried, appears to the eye little different from what it was before, having loſt not a ſixth part of its weight; but neither taſtes nor ſmells of cinnamon. Hence it is not the oil, but the ſpirit in the oil, and how ſmall a particula is it to which the notable virtues of cinnamon are owing? " Quare noviſti jam omnem inſitam aromati vim pro-
" priam, huic affixam pauciſſimo oleo, ſed in eo eſſe partem minimam.
" Atque particularis hæcce demonſtratio omni ferme alteri applicari poterit."
Boerh. l. c. " Oleo aromatum abſtracto, remanet corpus aromatis, velut
" ingratum. Cinnamomum puta, abducto oleo, ſapit corticem quercus, ſua
" adſtrictione." *Helmont, Tria prim. Chymicorum Principia*, §. lxxvii. p. 396. The great Boerhaave obſerves alſo, that if the pureſt ol. cinnamomi be diſſolved in alcohol, and all the alcohol be diſtilled off by a gentle heat, it will carry the ſpirit of the cinnamon along with it, leaving the oil behind it in fundo ſpiritibus privatum & ſimul reſineſcens. Vide *Chem.* ii. p. 243.—" 3. Cl. New-
" mannus (*Prælect.* p. 782.) Cinnamomum compoſitum eſſe dicit, ex parti-
" bus oleoſo-ſalino-reſinoſo-gummeis, & pro maxima parte terreſtribus. Ita
" ut in cinnam. ℔j. contineantur terræ inſolubilis ʒxij, fere. Reſinoſi ʒij.
" Gummoſi ʒjſß. & olei eſſentialis ℈ijſß. Oleum hoc ſcatere videtur multo ſa-
" lino quia cum aqua, non cum ſpiritu vini in deſtillatione aſcendit, pondero-
" ſum eſt, & difficulter ab aqua ſeparatur. Ait oleoſas partes, non intime
" cum reſinoſis eſſe miſtas, illis exiſtentibus ſeparabilibus per deſtillationem
" cum aqua, his autem cum vini ſpiritu per extractionem." Vide *Rieger. Introduct.* vol. ii. p. 886. Another remarkable in this eſſential oil is, that in time a great part of it turns to a real ſalt, diſſolvable in water. " Mirum
" ſatis in hoc oleo plurimis obſervatis conſtitit: ſi enim genuinum, ſtillati-
" tium, in Ceylona paratum, magna copia, vitris quam accuratiſſime clauſis,
" per annos plurimos, loco quieto, conſervatur, magna ejus pars in verùm
" ſalem, aqua ſolubilem, virtute propria cinnamomi prægnantem, mutata di-
" citur;

" citur; ut a variis fide dignis accepi. Insignis Slarius ait, dimidium illius " olei, viginti annorum spatio asservati, vitris bene clausis, in salem purum " abivisse." *Transact. Comp.* tom. iii. p. 362. *Boerh. Chem.* ii. p. 121. Vide *Phil. Transf.* N°. 213. p. 208. for September and October 1694.—4. It is no less wonderful, if true, that the different parts of the cinnamon tree, should yield oils very different in their qualities. " Destillatur ex radicis cortice " camphora, ejusdemque oleum: ex trunci cortice, oleum cinnamomi: ex " foliis oleum caryophyllorum: ex fructibus oleum juniperino simile, cum " pauxillo cinnamami ac caryphyllorum mixtum: ex his & excoquitur oleum " pingue crassum instar ceræ, ad emplastra unguenta & candelas conficiendas " commodissimum, medicamentum itidem, interne & externe usurpatur, " summe anodynum." *Ex Literis D. Pauli Hermanni, ad D. Syen. R. H.* 1561. Vide ibi quæ de camphora cinnamomi habet. — 5. I poured aquæ bullientis ʒvj. on cinnamomi ʒj. and when it had stood 24 hours it was pretty well tinctured, and tasted and smelled agreeably of the simple; it did not sensibly redden the tincture heliotropii, even after it stood macerating ten days; but a solution vitrioli turned it to a deep green, and made it opake; and the mixture, gradually precipitating a little olive sediment, became more clear, still greenish: but a stronger infusion, scarcely precipitated any thing. I said it did not sensibly redden the tinct. heliotropii, because though its own colour made it a little more reddish, yet ol. tartari dropt into it did not alter the colour of this mixture. After I don't know how many fresh affusions of boiling water, and long macerations, the residuum dried weighed gr. li. which calcined to gr. According to *Cartheuser* ii. p. 187. Cinnam. ʒj. gave extracti aquosi ʒj. but the same quantity of cinnamon yielded extracti spirituosi ʒjß.

SECT. III.

It may be given in powder to ʒj. but ʒß. need not be exceeded, both by reason of its bulk and of its efficacy; a drachm being enough in infusion. The preparations are aqua simplex, or sine vino; aqua spirituosa, or cum vino; & oleum essentiale. Cinnamon enters into aquam absinthii compositam, aquam mirabilem, spir. lavendulæ compos. sp. salin. aromat. laudanum liquidum *Sydenhami*, tinct. salutiferam, decoctum album utrumque, decoctum diascordii, emulsionem commun. syr. de senna cum rheo, pulv. ari compos. confect. alkermes, diascordium, mithridatium, theriacam, troch. cypheos, magma hedychroi. Ac denique oleum ejus ingreditur pulverem ad partum, & elect. cardiacum.

" Exhibetur substantia a ℈j. ad ʒß. vel ʒj, in infusione a ʒß. ad ʒij. oleum " essentiale, a gut. j. ad iij. cum saccharo in forma elæosacchari." *Geoff.* ii. p. 168.

" Suspicantur nonnulli cinnamomum, olei sui maxima parte spoliari in In- " diis." Vide *R. H.* 1562. " There is an oil drawn from cinnamon, called " also the essence, or quintessence de canelle, an excellent cordial: but the " Dutch only having the secret, the artists and chemists of France make it " both at a greater expence, and not so good; which obliges the greatest part

" of the druggists to bring it from Holland." *Savar. Dict.* i. 531. See the process in *B. Chem.* ii. 119.

Pure cinnamon oil must be very dear; viz. 128 times the price of the bark itself, if cin. ℔ j. yield only olei ʒj. I observed *anno* 1721, that the druggists in Holland sold an oil of cinnamon at 6 gilders per ounce; but the finest, oriental, they valued at 20 gilders per ounce, that is 50 stivers the ʒj, or the common price of the pound of cinnamon at Amsterdam. Hence it appears that all the secret the Dutch are masters of may be only how most artfully to counterfeit it; or distilling it in the Indies when fresh, thus obtain some more oil, than it can afford when brought to Europe, or long kept. " Cortex si " recens distilletur, multum suppetit olei, antiquum vero & diutius asserva- " tum, olei perparum exhibet." *Geoff.* ii. 166. However it may be sophisticated (α) with alcohol; but the cheat may easily be discovered, for dropt into water, it will turn milky. (β) With light oils; but if this be dropt into water, and strongly shaken for some time, they will separate, the one swimming above, and the other subsiding: It may be tried also with highly rectified sp. nitri. (γ) With heavy oils, as oil of cloves, of sassafras, &c. but making it into an elæosaccharum, and dissolving it in water, or small spirit, the taste and smell readily discover the cheat." " The best way to know its goodness, " is by dropping it on sugar, and then dissolving it in a small spirit: for thus " diluted, the taste easily discovers any foreign mixture." *Quincy*, p. 94.

The distilled waters, and especially the oil, have all the virtues of the cinnamon, excepting its astringency, if it can be said to be astringent at all. The water sine vino, is given to ʒiv. cum vino to ʒij. — Olei gut. j. cum saccharo, will make aquæ ʒij, good cinnamon water: so in elæosaccharo it may be taken in any liquid ad gut. j. vix ij; for by itself it is a strong caustic.

" In hoc oleo spiritum igneum penitus, brevique consumentem partes cor- " poris humani viventis, instar veri ignis, neque in aliis, invenimus, acrius " quid; ut experimentis sæpe constitit, sive externe applicatur, sive hauritur " interne, statim calefacit, excitat, inflammat, imo promptissime in escharam " gangrænosam exurit. Interim in universa M. M. invenitur nusquam aliud, " quod huic comparari queat, ratione virtutis instaurantis. Sique ullum " habetur fœminis solamen ad frigidi, mucosi, uteri pituitam, id vero hoc " ipsum est stillatitium oleum, lege artis adhibitum." *B. Chem.* ii. p. 121. This oil is in a manner the basis of a powder, which I mentioned formerly, now famous in France, Germany, &c. It is called, Aurum horizontale & panacæa Kornmanni, pulvis Dresdensis sive auratus Germanorum. *Pharm. Paris.* Pulvis aureus Cellensis. *Dispens. Ratisb.* Vulgo pulvis solaris seu aureus Zellensis, panacea solaris, pulvis solaris cinnabarinus. " A variis varie " paratur, tam quoad diversam proportionem ingredientium (viz. cinnabaris " nativæ & antimonii, ambrægriseæ, olei cinnamomi, sacchari, & calcis ac " folior. auri) quam quoad admistionem aliorum, vel omissionem ambræ puta " & auri. A viribus analepticis præcipue laudatur, quæ debentur oleo; co- " lor tantum cinnabari. Nam certus novi qui magnum pretium statuebat " compositioni suæ, quæ præter olei cinnam. gut xx. cinnabaris factitiæ ʒj. " & sacchari Canarini ʒiij. admistas continebat nihil. Ego jam non demiror " cur multorum medicamentorum præparationes celari soleant." Vide *Rieger Introduct.* ii. p. 894. The pulvis Dresdensis, *Zellensis edit.* 1743, sive auratus.

tus Germanorum. ℞ Cinnab. fact. ʒj. cinnab. antimon. ʒß. ſacchari candi ʒij. ambari cinericei, & olei cinnam. āā ʒj. f. ſ. a. pulvis. *Cod. Medicam.* p. 62.

" There would probably be little demand for the caſſia lignea, if it were " not to put it off for true cinnamon: a pound of cinnamon being as dear as " four pounds of caſſia lignea." *Savary Dict.* i. p. 572. " Ubi demulcen- " dum & aſtringendum, ratione ejus glutinoſitatis, cinnamomo anteponitur. " In tuſſi & aſthmate commendatur . . . in diarrhœis quoque & dyſenteriis, " ad viſcera roboranda, & ab humorum acredine defendenda." *Geoff.* ii. 172.

LECTURE XLVII.

CORTEX CITRI. *Vide* Mala Citrea.
FRAXINUS.

SECT. I.

FRAXINUS. Off. Fraxinus excelſior. *B. P.* 416. *T.* 577. Fraxinus, *Dod.* 833. *Ger.* 1472. *R. Syn.* 469. F. vulgaris, *Park.* 1418. F. vulgatior. *J. B.* i. ii. 174. *R. H.* 1702. Fraxinus, floribus nudis, *H. Cliff.* 470. The common aſh, or aſh-tree.

It grows wild in our woods, as well as in hotter climates, flowering in February and March, and ripening the ſeed in October. It is a large beautiful and uſeful tree.

" Fraxinus in ſylvis pulcherrima, pinus in hortis,
" Populus in fluviis, abies in montibus altis:
" Sæpius at ſi me, Lycida formoſe, reviſas,
" Fraxinus in ſylvis cedat tibi, pinus in hortis" *Virgil Ecl.* vii. v. 65.

Semen linguæ avis dictum, folia, cortex raro lignum, uſualia ſunt, potius medicinalia.

" Latini nominis etymon probabile apud grammaticos non invenio: nam a " frago dici, quod in fragoſis locis naſcatur, aut a φραξις, ſepimentum, quod " ad ſepes conficiendas utilis ſit, minus placet." *R. H.* All agree that our aſh is the fraxinus and μελια, of the ancients. For though Dioſcorides does not deſcribe it, yet *Theophraſtus Hiſt.* lib. iii. c. xi. p. 181. does, and alſo Pliny, but leſs accurately. " Fraxinus . . . procera ac teres, pennata & ipſa folia; " multumque, Homeri præconio, & Achillis haſta nobilitata. Materies eſt " ad plurima utilis." *Plin.* lib. xvi. c. xiii. p. 384.

SECT. II.

The bark and leaves are attenuating, deobſtruent and diuretic; called ſplenic, and lithontriptic; and commended in the ſpleen, jaundice, dropſy, gravel, exceſſive fatneſs, lues venerea, &c. and externally as diſcutient. The ſeed, being more oily, is preferred by ſome as a better diuretic.

" Folia

" Folia ſiccant valide, curantque ictus ſerpentum. Sed uſus ſunt rarioris. " Cortex & lignum, ſiccant itidem, attenuant, ſplenis duritiem ſpecifice " emolliunt; diuretica ſunt lithonotriptica, eaque non è poſtremis. N. ſunt " qui lignum die Joan. Baptiſtæ cæſum, vulneribus ſolo affricatu mederi cre- " dunt; cædunt autem alii ante ſolis ortum, alii ipſo meridiani temporis " puncto. Semen (foliis adhærens) calfacit & ſiccat valide, conducit epa- " ticis, pleuriticis, calculoſis. Præparationes ſunt, 1. Extractum ex cortici- " bus. 2. Oleum, ex ligno. 3. Sal com. ex cinere corticum. N. ſal ex " ligno incinerato vulneribus intus & extus, cum felici ſucceſſu, uſurpatum " vidi." *Schroder*, p. 592. Vide *Hoffman*, *Mangeti*, p. 416.

For 1. The bark is of a bitter, ſomewhat muſty, and ſubaſtringent taſte, and peculiar ſmell, when green only: as are alſo the leaves, but not muſty. The ſeeds are bitter and oily. The bitterneſs is not exceſſive, far leſs the ſtypticity. " Corticis infuſum vel decoctum, vitrioli ſolutionem, gallarum " inſtar, nigro colore tingit. *Geoff.* iii. p. 497. I made an infuſion foliorum, and alſo ſummitatum, ſine foliis, ſeparately, more theæ; and after a day's maceration, poured into a glaſs of each a ſolution of vitriol, which turned them greeniſh dark and opake; and they precipitated ſlowly. They did not turn tinct. heliotropii red; nor did ol. tartari make them fetid. — 2. An infuſion corticis, alſo ſummitatum, but not foliorum, reflects the blue, and tranſmits the orange rays of light, but not ſo ſtrongly as the lignum nephriticum, or more faintly. Acids and alcalies have the ſame effect on both. Aſh-tops and leaves are commonly burnt for the lye they afford, which is uſed in bleaching. " The leaves analyſed give a great deal of acid liquors, much oil and earth, " a little urinous ſpirit, no volatile ſalt, and a moderate quantity of fixed ſalt." *T. Hiſt.* p. 333. — 3. *Dioſcorides*, lib. i. c. cviii. p. 58. ſays, " Fraxini folio- " rum ſuccus, & ea ipſa tum in vino pota, tum etiam impoſita, viperarum " morſibus opitulantur." A friend told me that by a fomentation of aſh-leaves and tops, he cured his dog in a night's time, which from the bite of a viper had his head ſo ſwelled that he could neither ſee nor eat. I have uſed them frequently in diſcutient fomentations; though I think the antipathy the ſerpents are ſaid to have to this tree fabulous. " Tantaque eſt vis, ut ne matu- " tinas quidem, occidenteſque umbras, quam ſunt longiſſimæ, ſerpens arbo- " ris ejus attingat, adeo eam procul fugiat. Experti prodimus, ſi fronde ea " gyro claudatur ignis & ſerpens, in ignem potius quam in fraxinum fugere " ſerpentem." *Plin.* lib. xvi. c. xiii. p. 384. " Idem etiam ſe expertum pro- " dit Ambr. Paræus. At Camerarius contrarium ſe expertum in ſerpentibus " Germanicis: & D. Charas (*in obſ. & experim. de viperis*) aſſerit ſe facto circulo " e foliis fraxini, qui habuerat circa tres pedes diametri, viperam vivam in " eum immiſiſſe, que, folia nihil verita, illico ſub iis ſeſe occultum ivit." *R. H.* 1703. This Mr. Geoffroy tranſcribes, without mentioning Mr. Ray. — 4. It is commended in many diſeaſes, as for the ſpleen. " In libro de Dy- " namidiis Galeno adſcripto legimus, ad ſplenum, cortices fraxini excoque in " vino, & bibat quotidie donec ſanetur. Si vis probare, da Porcello per tri- " duum ut bibat, & in quarto occide ipſum, & non invenies ſplenem." Vide *J. B.* " In poculis ex ligno factis, ſi quis aſſidue bibat lienem extenuari " aiunt, eoque nomine & corticis decoctum quidam exhibent, quo etiam ali- " qui, vice ligni guajaci felici ſucceſſu utuntur." *R. H.* For the dropſy,

ague, rheumatiſm, green-ſickneſs, fatneſs, &c. " Fraxini ſemina (*autore Hippoc.*) " N°. x. trita & cum vino pota, urinam ducunt & vulvarum doloribus auxilio " ſunt." Vide *J. B.*

According to the analyſes in *Geoffroy* iii. p. 496. Fol. recentium ℔ v. gave olei ſpiſſi ʒiij. ʒß, ſalis fixi alcali ʒß. gr. xxv, terræ ʒxiij. gr. ij. — And cort. recentis ℔ v. afforded olei ſpiſſi aquâ gravioris ʒij. ʒij. fiſſura erat in retorta. Salis fixi alcali ʒij. gr. xlv. terræ ʒiv. ʒij. gr. ix. Is there ſuch a difference in the quantities of fixed ſalt and earth? Scarcely. " Semen fraxini incoercibile " fere ſal volatile, præbet." *Ludov. Ph.* 209.

The bark may be given in infuſion or decoction to ʒß, perhaps ʒj. the doſe not being determined. I would begin with ʒij. The ſeed in powder, to ʒj. or rather in emulſion. But it is a too common tree to be valued or uſed now-a-days.

GRANALORUM. *Vide* Balauſtium.
GUAJACI. *Vide* Guaiacum.
MACIS. *Vide* Nuciſta.

QUINAQUINA.

SECT. I.

Cortex, Cortex Peruvianus, China China, Quinaquina *offic.* Arbor febrifuga Peruviana. *Jonſ. De Dr.* 476. Arbor febrifuga, Peruviana; China Chinæ, & Quinquina, & Gannana peride dicta; Hiſpanis Palos de calentura; cortex arboris, cortex Peruvianus vulgo dicitur, inque pulverem redactus, pulvis patrum (ſcilicet Jeſuitarum) & pulvis Cardinalis de Lugo; Anglice the Jeſuit's powder, *R. H.* 1796. China Chinæ, *Schroderi App.* p. 30. Cortex Peruvianus, ſeu China Chinæ, *Morton, Pyretolog. Exercit.* i. c. vii. Cortex Peruvianus, Peruanus, China Chinæ, Quinquina offic. *Dale* 291. Kina Kina, cortex Peruvianus, & cortex febrifugus offic. vulgo, Quinquina, *Geoff. Mat. Med.* ii. 179. Arbre de Quinquina, *Mem. Acad. R.* 1738. p. 319. Cinchona Lin. *G. P.* 1021. p. 526. The Jeſuit's bark, or the bark, or Peruvian bark.

It is a pretty thick, dry, and friable bark, brown, rough, tranſverſely cracked, and ſometimes moſſy on the outſide, of a cinnamon colour within, and of a bitter and muſty aromatic taſte, with little ſmell, *i. e.* not ſtrong, but ſtill agreeably muſty.

If good and genuine, it is friable, not tough nor very hard, nor viſcous in the mouth, but fibrous; of a good cinnamon colour when powdered, not brown nor blackiſh; freſh, not carious; of a bitter and aromatic muſty taſte, neither intenſely bitter, nor nauſeous, nor very aſtringent. " It ought to be " of a bright cinnamon colour on the inſide, brown and ſometimes whitiſh on " the outſide, having moſs frequently growing on it, with ſeveral tranſverſe " clefts or cracks; appearing upon breaking full of ſhining particles; that of " the ſmaller branches rolling up like caſſia lignea. It is of a bitter and re- " ſtringent taſte." *Miller Bot.* 154.

It is brought from Peru, where the natives firſt taught the Spaniards its uſe. How long it was known there before, is uncertain, but the firſt European cured by it, that we hear of, was the Counteſs of Cinchon, *anno* 1640. See *Morton De Febribus Intermit.* c. vii. "Quomodo vero magnum hoc febrifugum Hiſpanis, cæteriſque Europæis primum patefactum fuerit, narrat "M. Antonius Bollus, (mercator Genuenſis, in epiſtola ſua Italice conſcripta) "autor fide dignus: Nimirum forte fortuito in civitate Limenſi, quæ eſt "metropolis regni Peruviani, uxor proregis, qui tum temporis (viz. *anno* "1640) erat Comes de Cinchon, febre tertiana ſæviſſima (qualis illic loci epidemia eſſe ſolet) correpta funeſte decumbere videbatur. Rumor (ut ſemper de magnatibus) per urbem divulgatus, tandem per finitima loca ad "Loxam uſque pervenit. Hiſpanus illius loci tunc temporis profectus, per "literas proregem monebat, in arcanis ſibi eſſe remedium, cujus auxilio proreginam ilico revalituram ſpondebat. Lubentiſſime annuens proregina, "corticem preparatum ſumpſit. Quid fit? Stupentibus omnibus, dicto citius "convaluit. Hinc fama hujus arcani titulo Pulveris Comitiſſæ inſigniti, ubique per civitatem Limenſem, totamque Americam, Hiſpanicæ ditioni ſubjectam, brevi multum inclaruit. Diſcedente autem prorege ex India, ubi "in Hiſpaniam reverſus eſt, ilico percrebuit ubique rumor de novo hoc febrifugo, quod poſt experimenta frequenter facta, votis ægrorum ſemper & "ubique reſpondebat. Circa annum ſalutis 1649. famam ſuam indies magis "magiſque provexit, non tantum per Hiſpaniam, verum etiam Italiam, Romam uſque, conatibus imprimis Johannis Cardinalis de Lugo Societat. Jeſu, "& cæterorum Collegii Jeſuitarum Romæ patrum, qui eum gratis religioſis "& pauperibus largiebantur. Unde infauſto omine, atque in vulgi reformati terrorem ac ſcandalum, Pulvis Patrum vulgo audit, *Anglice*, the "Jeſuit's Powder." Thus *Morton*. All which, and much more, is tranſcribed by Mr. *Geoffroy*, *M. M.* ii. p. 181. without naming his author. Mr. *Savary* ſays alſo, "That it was but ſixty years ſince this bark was firſt known in "France, whither Cardinal de Lugo brought it, in 1650. When a doſe of it "(continues he) is ſaid to have been ſold at a crown of gold. This too great "price, or perhaps the little effect it had, through its preparation not being "well known, brought it into diſuſe; and it began to be little known when "Chevalier Talbot an Engliſhman, in 1706. (for 1679.) brought it again in "vogue, by the many ſurpriſing cures performed both in the court and town, "by this powder prepared his own way; the ſecret whereof was made public "by the generoſity of Lewis XIV. who by a liberal reward obliged that "ingenious Engliſhman to communicate his preparation." Thus *Savary*. "*Anno* 1649, this bark was brought from Peru to Spain by a Spaniſh vice-"roy. In the ſame year the Cardinal de Lugo, and ſome Jeſuits from America, having brought it, and ſpread the knowledge of it through Europe, "made great gain of it." Vide *Lemery D.* 287,

But according to Mr. de la Condamine's Memoire of the Quinquina tree, ſent from America, dated May 29, 1717, and publiſhed in the *Mem. Acad. R. anno* 1738. p. 319—346. "This bark was uſed, and its effects known, at "Loxa, by the Spaniards, long before the reſt of the world became acquainted "with it. Yet it was the Counteſs of Chinchon's being cured of an obſtinate "tertian by it, that firſt made it famous, which was in 1638, the Count's

" viceroyalty having ended in Dec. 1639. After the counteſs's recovery, ſhe " procured a quantity of the bark, and diſtributed it to all who needed it, and " thus it got the name of the Counteſs's Powder. Some months after the " Counteſs freed herſelf of that trouble, by giving what bark ſhe had to the " Jeſuits; who continuing to diſtribute it gratis, it was on that account called " the Jeſuit's Powder. A little after this the Procurator-general of Peru re- " turning to Rome, the Jeſuits ſent by him ſome quantity of it to Cardinal " de Lugo, of their ſociety: from whoſe palace at firſt, and then from the " apothecary-ſhop of the Roman college, it was given to the poor gratis, " and to others for its weight of ſilver, by the name of the Jeſuit's Powder, " or Cardinal's Powder. It is ſaid that the ſame Procurator of the Jeſuits, " going through France to Rome, recovered Lewis XIV. then Dauphin, of a " fever with the Quinquina: (which muſt have been before May 14, 1643. " when Lewis XIII. died, if not a French fiction?) In 1640, the Count and " Counteſs of Chinchon, being returned to Spain, their phyſician Inande Vega, " who had brought une proviſion de Quinquina along with him, ſold it at " Seville at 100 reals (*i. e.* about *N. B.* 56 ſhillings ſterling) per pound. Its " reputation continued (adds he) until the unpeel'd trees becoming ſcarce, the " inhabitants of Loxa, out of avarice, mixed other barks with it; which be- " ing known, the Quinquina of Loxa fell into ſuch diſcredit, that it would " not give half a piaſter per pound. And in 1690, ſeveral thouſand pounds " of it lay at Piura and Payta, and nobody to purchaſe it." Thus Mr. de la Condamine makes the Grand Monarque to be the firſt in Europe, who felt the effects of this medicine, and gives the Jeſuits the honour of having firſt brought it thither. I wiſh he had given his authority. For how he comes to be better informed than Bollus who lived many years in Peru, (*R. H.*) three or four-ſcore years before him, does not appear. I ſhall only obſerve further, that in 1688, and ſome years before, there were imported at Marſeilles, from Cadiz, between 150 and 200 quintals of this bark annually; valued at that year at 30 to 40 ſols per pound. Vide *Sav. Dict.* iii. p. 551.

There is an account of Mr. Talbot's method of cure in a little book called *Le Remede Anglois, pour la gueriſon des Fievres, publie par Ordre du Roi. Par Nicolas de Blegny. A Paris* 1682. in 12mo. of 141 pages. Then ſure the bark was in as great credit as ever, though the great import brought down the price: and whatever character ſome are pleaſed to give Mr. Robert Talbot, Talber, or Taber, or he may deſerve; yet he, by his audacious, and perhaps alſo injudicious practice, contributed not a little to the diſcovery of the real virtues and right uſe of this valuable medicine.

" Pulverem hunc ante 30 annos (ſo about the year 1658) cum primo in " Angliam invectus eſſet, in magna æſtimatione fuiſſe memini: Sed animad- " verto eum (quod ſcilicet nimis parca doſi exhiberetur) paroxyſmum unum " vel alterum, aut forte plures avertere, nec febrem penitus expugnare, ve- " rum ægrotum plerumque recidivam pati, ob ſuſpiciones neſcio quas, in " crimen adduci cœpit, & paulatim in deſuetudinem abire. Donec nuperis " annis, D. Robertus Tabor, doſi ejus valde aucta, non minus felici ſucceſſu, " quam incepto audaci, febribus omnibus profligatis, uſum reſuſcitavit. Hic " enim non intra ſcrupulos ſubſiſtebat, ſed ad drachmas & uncias aſcendebat, " indeque voti compos factus, magnam & ſibi, et pulveri famam conciliabat."

" *R. H.*

" *R. H.* " Tandem noſtris temporibus, in Gallia præcipue & Anglia ſum-
" mopere decantatur hoc febrifugum, poſtquam Delphinus Galliarum, variis
" ante, ſed in vanum adhibitis remediis a Talbotio Anglo cort. hoc a quartana
" liberatus fuit. Unde factum ut et Rex Ludovicus XIV. a citato jam Tal-
" botio, medicamentum hoc, antea in ſecretis habitum, magno pretio redi-
" meret, & in ſubditorum ſolatium ſcripto quodam publico propalaret."
Mich. Bern. Valentini Diſcurſus Acad. de China Chinæ Miſcel. Cur. Decur. 3 an. 3. p. 47. for 1695 and 1696. — " Cum inſuper medici cæteroquin docti &
" probi animadvertiſſent pulverem febrifugum paroxyſmum tantum unum aut
" alterum, aut fortaſſe plures avertere, nec febrem penitus expugnare, verum
" ægrotum plerumque recidivam pati, ob ſuſpiciones ſupra dictas (viz. that
" it left *fermenta morboſa in corpore*, becauſe it cured without evacuation) in
" crimen adduci cœpit, & præterea ob pretium pulveris, qui tunc grandi
" pecunia divendebatur, paulatim in deſuetudinem abivit, donec anno 1679.
" Robertus Taber vel Talbot eques Anglus, nova introducta corticis exhi-
" bendi ratione, & doſi ejus admodum aucta, non minus felici ſucceſſu quam
" incepto audaci, febribus omnibus profligatis, Kinæ Kinæ uſum ſub *Anglici*
" *remedii* nomine, vulgo *le remede Anglois*, in Gallia reſuſcitavit. Hic enim
" non intra ſcrupulos aut drachmas, ſubſiſtebat, ſed ad uncias & libras aſcen-
" debat; ſicque magnam ſibi & remedio famam conciliavit. Summa autem
" cura remedium illiuſque præparandi rationem, occultabat; ita ut fortaſſe
" adhuc ignotum lateret, niſi Ludovicus Magnus, feliciſſimo ejus experimen-
" torum ſucceſſu permotus, largam authori mercedem rependendo, corticis
" Peruviani exhibendi rationem, omnibus notam feciſſet, juſſiſſetque ut cor-
" tex ille undique conquiretur, & ut exercituum noſocomiis totumque per
" regnum diſtribueretur, mandaviſſet." *Geoff.* ii. 183.

There have been ſeveral lame accounts of this famous tree, as by Bollus in Merton. l. c. Oliver in *Phil. Tranſ.* No. 290. Arrot. in *Phil. Tranſ.* No. 446. but for a full, and, I hope, exact deſcription and figure of it, we are indebted to M. de la Condamine alone, which the Acad. Royale has publiſhed in their *Memoirs* for 1738, and the editors of M. Geoffroy's M. M. have tranſlated into Latin. As it does not appear to belong to any genus of plants known, Mr. Condamine has undoubtedly a right to name it; which if out of modeſty he refuſe, I think botaniſts ſhould do, and call it Condaminea rather than Cinchona.

The fruit and ſeeds of this tree, as deſcribed and figured by M. de la Condamine, differ in nothing from what a curious and learned young phyſician, Dr. Wm. Horſeburgh, gave me in autumn 1736, for the fruit and ſeed of the Jeſuits-bark-tree. I attempted to raiſe ſome of it on a hot-bed the ſpring following, but without ſucceſs; and no wonder, ſince M. Condamine could not make it grow at Quito.

" The name quinquina is American, but the bark ſo called in Europe is
" known in Peru only by the name of corteza, or caſcara de Loxa, or more
" commonly caſcarilla, that is, the bark of Loxa, or the little bark. But
" there is another famous tree, known in diverſe provinces of South Ame-
" rica by the name quinaquina: it yields by inciſion an odoriferous roſin,
" and its ſeeds are called by the Spaniards pepitas de quinaquina. The bark
" of this balſamic quinaquina is reckoned an excellent febrifuge; and be-

" fore the Loxa-tree was diſcovered, it had great reputation in tertians. The " Jeſuits of La Paz or Chuguiabo uſed to gather it with care, and ſend it " to Rome, where it was diſtributed under its true name quinaquina. It is " very bitter, and was given in intermitting fevers. But the Loxa bark " coming to Europe the ſame way, this new febrifuge was confounded with " the old, and prevailing it kept the name of the firſt, which is now almoſt " entirely forgot. Quin ai, in the Quichoa tongue, ſignifies, in Spaniſh, " Mantelilla, Inda, (une mante on cape) a mantle or hood in uſe among the " natives; and probably, by a metaphor, the bark of a tree; and if ſo, the " repetition common in that language, quinaquina will ſignify the bark, by " way of excellency, or the bark of barks." Thus M. Condamine, whoſe conjecture as to the etymon of the name, ſeems not improbable; but his account of the old quinaquina is new to me. I wiſh he had told us when it came firſt to Rome; whether before or ſince the Counteſs of Chincon's cure; for the oldeſt deſcription that I have ſeen of the quinaquina, as well as the accounts of its effects, agree perfectly to that at preſent uſed.

" Quin-quinam eandem malunt dicere illi, qui nomen hoc a comite de " Cinchon prorege deducunt." *Valentini.* l. c. p. 48.

How the natives of Peru firſt diſcovered the virtues of this bark cannot perhaps be certainly known. We have however two accounts or traditions concerning it, one related by M. Geoffroy, and another by M. Condamine; and which of them is moſt probable I leave you to judge. " Sic, inquiunt, " ſorti & obſervationi debetur corticis Peruviani inventio. Forte quædam " Kinækinæ arbores in ſtagno deciduæ jacebant & putreſcebant. Nemo ejus " aquam præ inſigni quem inde contraxerat amarore, guſtare poterat. Qui- " dam tamen ex incolis circumdegentibus æſtu febrili correptus, urgentemque " ſitim largo ejus aquæ hauſtu depellere conatus, cum ſiti febrem amiſit. " Quod cum expertus fuiſſet, cæteros febre laborantes eodem uti remedio " ſuaſit. Nec infelix fuit ſucceſſus. Sic aqua ingrata guſtui, ſalutaris evaſit. " Sed cum per tempus, putrefactis arboribus, aquæ vis febrifuga cum amaritie " evanuiſſet, altius hujus amari ſaporis & febrifugæ virtutis cauſa inquiſita, " eam tandem ab arborum corticibus pendere cognoverunt. Sic incertum " quod ſors obtulerat remedium, accuratiori inveſtigatione è tenebris in qui- " bus deliteſcebat erutum fuit, & poſtea diligentibus obſervationibus con- " firmatum." Thus Geoffroy, i. p. 48.

" According to an ancient tradition, the truth whereof I will not war- " rant, the Americans owe the diſcovery of this remedy to the lions, which, " ſome naturaliſts pretend, are ſubject to a kind of intermitting fever. They " ſay, the natives having obſerved theſe animals did eat the quinquina bark, " they made uſe of it in agues, pretty frequent in that country, and expe- " rienced its ſalutary effects." Thus M. Condamine, l. c.

He ſays alſo, that " the quantity that comes to Europe of this bark makes " the Peruvians believe that it is uſed in dying; and that it happens to " quinquina, as almoſt to all common and cheap remedies in their native " country, that it is little valued or uſed in Peru; little in Lima; much " leſs at Quito; and almoſt not at all at Loxa. Yea, that at Puerto Viejo, " though not far from Guayaquil, where there is a great trade in it, he did " not meet with one who had ſo much as heard of that famous remedy ſo

" near

" near them." To him I refer you for the deſcription of this tree, the management and kinds of the bark, &c. and to Linnæus, l. c. for its botanical character.

LECTURE XLVIII.

SECT. II.

THE bark, quinquina, attenuates viſcous humours, prevents or hinders putrefaction, ſtrengthens the ſtomach and inteſtines, promotes perſpiration and the free uniform circulation of the blood; and is a divine remedy for intermitting fevers. It is alſo of great uſe in the ſmall-pox, gangrenes, and mortifications: in hyſteric and hypochondriac diſorders; in periodical head-achs, tooth-achs, cholics, and in all diſeaſes which have regular intervals, or attack by fits.

" China Chinæ calida & ſicca eſt, vim habens aperiendi, diſcutiendi, atte-
" nuandi, reſolvendi, putredinem arcendi, roborandi. Uſus eſt in debellandis
" febribus intermittentibus, & hic quoque Francofurti ſatis frequens, quod non
" careat optato ſucceſſu." *Append. in Schrod.* p. 31. " Menſes ciet, obſtruc-
" tiones aperit, ventriculum atque genus nervoſum univerſum confortat." *Morton de Feb. Intermit.* cap. 7. " Ventriculum roborat, appetitum languen-
" tem excitat, ciborum concoctionem juvat, flatus diſcutit, vermes necat;
" nec non etiam urinas & menſes promovet. Sed maxime commendabilis
" eſt ſua febres intermittentes profligandi virtute: eas enim, rite exhibita,
" tuto, cito, jucundeque ſanat." *Geoff.* ii. 185.

This bark being in Dr. Sydenham's opinion the only ſpecific remedy, ſtrictly ſpeaking, that is yet known, and its effects both ſingular and ſurprizing, it is not to be wondered at, that phyſicians were for ſome time divided in their opinions as to its ſafety, and alſo as to the manner of its operation. For as, on the one hand, ſome condemned its uſe altogether, becauſe it did not evacuate the morbific matter; others, becauſe it bred obſtructions in the viſcera, by its heat diſſipating the thinner parts of the humours, and thickening the groſſer; others again, becauſe by its narcotic quality it only bound up the ſpirits, and ſtopped the paroxyſms for a time, which either returned with more violence, or by tranſlation of the peccant humour into the more noble parts, more fatal diſeaſes ſucceeded: So, on the other hand, it was as ſtrenuouſly defended by not a few, though on very different principles; ſome placing its efficacy *in tenuitate partium ejus*; others in its diuretic, diaphoretic, and cathartic qualities; others in its *caliditas & ſiccitas*; others in its occult qualities. Vid. *Morton* l. c. whoſe opinion coincides with the laſt mentioned; and he is at great pains to prove, that *vi ſua alexipharmaca*, it deſtroys the fermentum febrile, which, according to him, is *quid venenatum vel deleterium in ſpiritibus diliteſcens*. Again we find others have been of opinion that it acted by its bitterneſs and aſtringency. Vid. *Hiſt. Acad. R.* 1711. And Dr. Quincy's long account, " how this wonderful drug diſplays its virtues," comes to no more than this, that by the ſubtlety and texture of its parts it attenuates the blood, and by its

ſtypticity

ſtypticity ſtrengthens the fibres; attributing, at the ſame time, its moſt ſurprizing effects to its roughneſs or aſtringency. And to add no more, Mr. Geoffroy accounts for its effects by its ſtyptic bitterneſs and acidity. For, according to him, the efficient cauſe of intermitting fevers is a "ſuccus excrementitius nervis infenſus, in ſanguine redundans, cujus natura ad ſalem alcali urinoſum proxime accedere videtur, cum partibus quibuſdam biliofis, ſeu ſulphureis aduſtis permiſtus:" whence he concludes that the "Energia kinæ kinæ partim ejus ſtyptico amarori, partim acidis, quibus donatur particulis debetur." Now the bark, adds he, being poſſeſſed both of ſtyptic bitterneſs and of acidity, not only blunts the acrid cauſtic ſalts, but alſo ſtrengthens the fibres, reſtores their tone, and enables them to throw off the morbific matter, either by ſtool, urine, ſweat, or inſenſible perſpiration; "Sicque ſæpe cathartici, diuretici, ſudoriferi, aut diaphoretici vices adimplet." Thus Mr. *G.* tom. ii. p. 198. How far theſe opinions are conſiſtent with the following facts, I leave it to you to determine. I ſhould have told you that Mr. Geoffroy owns that what he propoſes, is only a probable conjecture. Let us now examine if by any means we can diſcover the primary effect of this medicine, on which its ſpecific virtues depend. In order to which, I obſerve,

1. That the bark is very bitter, but neither nauſeous like aloes, nor ſo very bitter as gentian or wormwood: the bitterneſs is not immediately perceived, but continues long in the mouth; inſomuch that after chewing a little of it, though kept more than 20 years by me, the bitterneſs continued perceptibly on the tongue full three hours. It is alſo aromatically muſty; but ſcarcely aſtringent. I have attentively taſted many ſamples of it, and of different ages: ſometimes I could perceive no ſtypticity, at other times a little roughneſs, or dryneſs on the tongue; and at other times it appeared ſubaſtringent, like dried ſorrel roots. That which was moſt aſtringent, was the thinneſt, and moſt recent, ſo far as I could learn. "Fateor quidem levem quandam aſtrictionem, ſive auſteritatem cortici ineſſe, &c." *Morton*, lib. i. p. 51. "Genuinus cortex, ſapore ſatis grato, & aromatice-amaro eſt; injucunde amarus, & intenſe acerbus, pro ſuppoſititio habendus eſt: genuinus odorem ſpirat peculiari modo mucidum, attamen ſuavem, gratum, & aromaticum; atque huic ſenſui, in corticis ſinceritate deprehendenda, præ cæteris omnibus credere ſoleo." *Id.* p. 66. Beſides it does not act on a ſolution of green vitriol, as vegetable aſtringents do. For I infuſed the powder'd bark in a weak ſolution of this vitriol for ſome time; it did not turn purple or black, but beautifully green. The ſolution of vitriol had the ſame effect on infuſions, of both more recent, and of old bark, made with boiling water, and long macerated in it. Spirit of vitriol or of vinegar deſtroyed the green colour. The firſt infuſion being poured out, and freſh boiling water added (and this repeated many times) the ſolution of vitriol dropt into each made them green, but gradually fainter for ſome time, till at laſt it had no effect. Hence more is to be expected from the bitterneſs than the aſtringency of the bark; and it acts more like an alcali, than an acid on the ſolution of vitriol, from which it cauſed a precipitation after ſeveral infuſions.

2. That though the bark ſoon and eaſily communicates ſome of its bitterneſs, &c. to water, yet how long and how often it muſt be infuſed, yea decocted,

cocted, before it becomes insipid, I have not yet found out. I poured upon corticis ℈v. gr. ij. broken into small bitts, aquæ bullientis ℥vj: in less than a minute it tasted bitter. After it had stood two days, the infusion was of a whitish, or whey-colour, bitter, and aromatically-musty, like the substance: it only diluted syr. violar. and gave tincture heliotropii a wine-colour; the mixture next day precipitating a crimson sediment, which was dissolved by a few drops of oil of tartar, p. deliq. the mixture becoming of a blood-red colour and transparent. So though it redden'd the tincture of turnsole, it did it but little, and an alcali added redden'd it more; which therefore can scarce be attributed to its acidity. One argument for the acidity of the cortex advanced by Mr. Geoffroy is this, "Infusum corticis chartam cæruleam, (which elsewhere he calls chartam succo heliotropii tinctam) subrubro colore inficit." *Mat. Med.* ii. p. 185. I soaked in this infusion a piece of the blue paper with which sugar-loafs are commonly covered, for a whole night, and it was so far from being red that it had lost its purplish cast, and become grayish, or of a worn-out and faded blue colour. Oleum tartari gave the infusion an urinous smell, though not strong, and turned it first yellow, and afterward red like saffron. With solutio vitrioli it became green, transparent and clear at first, soon turbid; and then precipitated a little of a dark gray sediment, which some drops of the sp. vitrioli dissolved, clarifying the mixture. Spirit of vitriol only diluted the infusion.

Some days after I poured off the remainder of this first infusion, washed the bark with cold water, and then poured on it aquæ bullientis ℥vj. When it had stood some days macerating, I renewed the former mixtures, and had the same phænomena; the colour and taste the same. I repeated the washings and fresh boiling water, a second, and third time, and I do not remember how often more, for the space of nine months, suffering the bark to soak in the water, sometimes several weeks together. And yet the last infusion continued bitter and whitish coloured. And having well dried the remaining bark, it weighed ℈iij. gr. xix: so that the water had extracted thus gr. xxiij. *i. e.* a little more than one fifth. These 79 grains remaining of the bark I wrapt in a clean linen rag, and decocted full four hours in water, then dried and weighed it. This was repeated once and again, a week always intervening. The weight of the bark was diminished by the first decoction, gr. iv. by the second gr. jß. and by the third gr. j. So there remained gr. lxxijß. gr. xxixß. being extracted or lost, by all these infusions and decoctions. There were about ℥iij. of each decoction. All were bitter. The first was deeply tinctured, the last much paler. The remaining corticis gr. lxxijß. infused in alcoholis ℥xij. for forty days, and then dried, weighed gr. lxviijß. and so lost ponderis gr. iv. I should have noticed that the solutio vitrioli made the first decoction a little turbid; scarcely altered the third; but both in a day or so, thus mixed, let fall a little of greyish sediment, which on the affusion of vinegar dissolved, but sp. vitrioli made the mixtures more clear. And after all, the bulk texture and firmness of the bark seemed nothing altered; but its colour was darker and more reddish. I also repeated the infusion of corticis pulv. ʒij. in boiling water ten times; and made the former mixtures: the appearances were the same; to the last it was wheyish-coloured and bitter. I likewise infused corticis pulv. ʒij. in spir. vini Gallici ℥iij. in about five minutes it was more deeply tinctured than the first infusion, of other ʒij.

of the ſame powder, in boiling water, after it had ſtood ſeveral days. After fourteen days I filtered it, and dried the powder; it weighed ℈iv. gr. viij. ſo extracted by the brandy ℈j. gr. xij. Brandy therefore, without heat, in fourteen days time, extracts near as much from the bark, as the water did by all the former infuſions and decoctions in nine months, wanting about a fifteenth part only, or, more exactly, a ſixteenth part: for as the brandy extracted from 120 grains pulveris 32 grains, ſo water would extract from the ſame quantity, but 34½ grains, for 120 : 34-5 : : 102 : 32. nearly.

Hence we ſee (α) that the diſſolvable part of the bark, is to the undiſſolvable part, nearly as 3. to 10. (β) That the diſſolvable part is more eaſily extracted with brandy than with water. (γ) That ſo long as the bark in ſubſtance continues in the *primæ viæ* it will be ſtill impregnating the juices therein contained, and conſequently the chyle, with the virtues of this diſſolvable part. And (δ) that this diſſolvable part is much more ſulphureous, than ſaline or mucilaginous. If, as Mr. Geoffroy ſays, one fourth part of the bark is roſin, (vide *Mat. Med.* ii. p. 185.) which I would rather call ſulphur, there will be more than three parts of roſin for one part gummy or ſaline. To examine how far this proportion is juſt, I infuſed corticis pulv. ʒij. in alcoholis puriſſimi ℥ij. and after it ſtood, ſometimes near the fire, and ſometimes in the window, for twice forty days, I found that it had extracted gr. xxxij. that is above a fourth part of the whole, and conſequently about gr. vj. leſs than both water and ſpirit ſeparately drew. I had formerly infuſed corticis pulv. ʒj. in alcohol ℥j. for forty days, cold in a window; then filter'd, and had of reſiduum well dried gr. xliij. the ſpirit having extracted gr. xvij. (The roſin, or ſulphur, crumbles into a powder: nor is it eaſy to give the extract a tolerable conſiſtence.) Hence in corticis ʒj. there are ſulphuris, or extracted by alcohol gr. xvij. ſaline and gummy gr. ijß. and terreſtrial parts gr. xlß.

" Phil. Adol. Bohmerus in Diſſert. de Cort. Caſcarillæ, p. 30. ex cort. ℥j. " extracti aquoſi primi ʒij. ferme; & extracti ſpirituoſi primi ʒj. ſe impetraſſe " perhibet. Newmannus, ex cort. ℥j. extracti ſpirituoſi primi gr. xxxviijß; " aquoſi ſecundi gr. xxiiß; aquoſi primi gr. xxxijß; ſpirituoſi ſecundi gr. " xxijß, obtinuit. Ego autem extracti ſpir. primi ℈j. gr. xij. & aquoſi primi " gr. xxxvij. impetravi. Bolimerus non tantum digeſtioni, ſed etiam coctioni " ſubjecit." *Cartheus* ii. 522. & p. 526. Tota juvandi ratio, ſays he, ad abſterſionem (parte gummoſa) & adſtrictionem (parte reſinoſa) redit. How true will preſently appear.

3. That the chemical analyſis neither explains, nor confirms any of the virtues of the bark; none of its principles ſeparately, nor all conjoined, being equally efficacious with the ſubſtance. Vide *Pitcarnii Diſſert.* But ſince it is brought to prove that the bark contains multum ſalis acidi, let us ſee whether that concluſion can be drawn from it. " Quinquinæ ℥xxxij. diſtilled by a " retort, yield of ſpirit and phlegm ℥xj. of black fetid oil ℥ijß. and of fixed " alcali ſalt ʒij." *Lemery Chym.* 597. " Analyſi chymica, kinæ kinæ craſſe " contuſæ ℥ivß. Phlegmatis acidi ℥j. ʒivß. ſuppeditarunt: quarum priores " portiones ſolius acidi notas præbuerunt, poſteriores vero non ſolum intenſi " acidi, ſed etiam alcali urinoſi ſigna exhibuerunt. Nam heliotropii tinctu- " ram cæruleam in rubrum liquorem mutaverunt, nec non etiam ſublimati " ſolutionem turbidam & lacteſcentem reddiderunt, & ex ea pulverem albam

" precipitaverunt. Deinde olei craſſioris conſiſtentiæ & axungiæ porcinæ " ſimilis ʒj. gr. lxviij. prodiit. In retorta reſidui nigri pondus fuit ʒj. ʒij. " gr. viij. Calcinatum vero ad albedinem pendebat ʒj. gr. xv. a quo ſalis fixi, " non mere alcali ſed nonnihil ſalſi ʒß. per lixivium extracta fuit. Unde li- " quet hunc corticem multum ſalis acidi, & olei craſſioris continere, perpa- " rum terræ, cum tantillo ſalis urinoſi." *Geoff.* ii. 184. So they differ in the oil, and fixed ſalt: and I am afraid the phlegma's reddening the tinctura heliotropii, eſpecially while it precipitated a ſolutio ſublimati, will not prove it to be intenſe acidum. Beſides, the phlegma, oleum, & carbo, making all together but ℥iij. gr. xl. (which wants more than a third part of the ℥ivß.) there is here probably ſome miſtake. I calcined ſome bark (ʒij. gr. xxvij.) in a crucible, by which it was reduc'd to about a 36th part (gr. iv.) from which I made a lixivium, which dried afforded of earth no more than a 58th part (gr. ijß.) and fixed ſalt (all alcali) a 98th part (gr. jß.) I ſuffered the lixivium to evaporate to dryneſs in a window in a tea-cup, and it appeared like paper cut into the figure of branches and leaves, very ſmall, regular and beautiful; but after ſome time, the air becoming moiſt, it diſſolved. — *N. B.* Not much different from Mr. Geoffroy's proportions.

4. That the bark may have conſiderable influence on the blood and humours, appears by Dr. Freind's and Mr. Leeuwenhoek's experiments. For according to Leeuwenhoek, (α) An infuſio corticis in rain-water, mixed with blood new drawn from his finger, divided ſome of the red globules into the conſtituent ſmaller ones; and coagulated others. " Adeo ut (ſays he) " multis in locis, non alios contemplarer globulos jacentes, quam qui nu- " mero ſex unum globulum ſanguinis conficerent. Ac quoque particu- " las ſanguinis conſpexi jacentes quæ tam parvæ erant, ut duntaxat vi- " geſimam ſextam partem unius globuli ſanguinarii eſſe judicarem. Præ- " terea, aliquibus in locis, globuli ſanguinarii in ſeſe jacebant coagulati; " quod ortum eſſe judicabant, ex frigido humore, qui ad calidum acceſſerat " ſanguinem." (β) A tincture of the bark in ſpirit of wine, mixed with blood as above, immediately coagulated many of the globules, while many others were divided into the ſix ſmaller ones. (γ) The chymical oil of the bark ſuddenly coagulated ſome of the globules of the blood, but made others ſo clear, that it was eaſy to number in ſome three, in others four, and in others five of the ſmaller globules of which they conſiſted. But the infuſion of the caput mortuum made no change on the globules. Vide *Leeuwenh. Continuatio ad S. S.* (*Nov.* 28, 1687.) p. 119. And Dr. Freind ſays, that (α) a ſtrong infuſion of the bark in wine, mixed with freſh arterial blood of a dog, " Sum- " mam ei fluiditatem, & colorem elegantiſſimum conciliabat." But that a tincture of it in ſpirit of wine had the contrary effect. (β) That a decoction of the bark made the ſerum ſanguinis humani more fluid, than a decoction of ſavine, gentian, or ſarſa; or than ſp. ſalis ammoniaci, c. c. or the like, could do. (γ) That decocti fortiſſimi ℥jß. injected into the jugular vein of a dog, in ¼ horæ cauſed ſtrong palpitations of the heart, and frequent ſpaſms: and ℥ß. more being injected, he died tetanous. That upon opening the crural and axillary veins, iſſued ſanguinis rutilans & liqueſcens: the day following the lungs were red and turgid; in the right ventricle of the heart, ſanguis plurimum accumulatus, & proinde compactus; in the left ventricle little blood, and that very fluid; and from the jugular vein alſo, ran blood thinner and

more liquid than in a natural ſtate. Vide *Freind's Emmen.* c. xiv. Can we thence infer that it attenuates, or that it coagulates the blood? But that ſuch a ſmall quantity of the decoction, (if filtred, warm, and ſlowly injected) ſhould kill a dog ſo ſoon is ſomewhat extraordinary.

5. That no infuſion or decoction of the bark is ſo effectual in ſtopping intermitting fevers, as is the powder in ſubſtance. For not only old and carious bark has been found as ſucceſsful, as the moſt recent in Britain; but alſo the ſubſtance to cure, when the decoctions, &c. failed. "Propria expe-" rientia teſtor, me ante 20 annos, cortice trunci ſæpe uſum eſſe, ad craſſitiem " & latitudinem volæ manus magnis & profundis ſulcis, & fiſſuris conſpicuo, " velut in vetuſto arbore imo eundem aliquando valde carioſum, putridum-" que, ex neceſſitate, quod melior nullo pretio tunc temporis haberi potuit; " & olim & nunc me vix unquam fruſtravit eventu optimo & deſiderato: " maxime ſi ejus modus & tempus exhibitionis rite obſervantur." *Liſter de Hydroph. Mant.* §. ult. p. 56. "A D. M. Liſter edoctus ſum pulverem cor-" ticis vetuſtioris, experientia propria, non minus efficacem eſſe ad profligan-" das febres, quam recentis; aliquo etiam reſpectu commodiorem: ſiquidem " diuturnitate temporis, vis illa cathartica, quæ in recenti obſervatur, & " aqueæ, ut veriſimile eſt, parti inhæret, paulatim evaneſcit." *R. H.* 1797.

"Quicquid dicit Ant. de Heyde (ait D. Hulſe) ego, aliique medici, qui-" buſcum conſuetudinem habui, corticis pulverem in ſubſtantia exhibitum, " efficaciſſimum eſſe ſemper comperimus, etiam adverſus contumaciſſimas " febres, quæ infuſo ejus minime cedebant. Quin & D. Liſter mihi aſſeruit, " infuſum nihil valere, totumque ejus operationem, ſubtilioribus pulveris par-" tibus, in liquore adhuc a defæcatione reſiduis deberi." *R. H.* l. c. Hence all its virtues do not ſolely depend on its diſſolvable, or more volatile part.

6. That the moſt fixed part, or what remains after long infuſion, decoction, &c. has been often found as effectual in ſtopping agues, as the freſh powder. "Quidam totam vim chinæ chinæ in parte hujus corticis volatili " repoſuere. Verum non ſemel totam tincturam, atque etiam amaritiem cor-" ticis per iteratas, eaſque longas, tum coctiones, tum macerationes, in ipſo " ſpiritu vini, aut aqua ſale tartari, abſynthii, aliiſque acuata, extraxi; non " ſic tamen minus, quod reſtabat corporis illius corticis, inſipidum prorſus, " ac tanquam caput mortuum, febres reſtinguebat, dum illud largo exhibe-" bam doſi: imo minus moleſtiæ ſæpius creabat ſtomacho, quam ſi crudum " corticem obtuliſſem.—Tincturæ autem omnes, quas ſive per coctionem in " aqua ſale tartari acuata, ſive per digeſtionem in vino ſpiritu vitrioli aut ſul-" phuris animato, ſive per ipſum vini ſpiritum, ſale ammoniaco impregna-" tum, aliæque plures quas elicui, effectum ſuum ad tempus tantum præ-" buere." *Mangeti Bib. Pharm.* ii. p. 679. "It loſes indeed moſt of its bit-" terneſs by infuſion, but its roughneſs remains; and upon trial it hath been " found, that if it be then powdered, and given in ſubſtance, it will make " a cure as effectually, as when given before ſuch infuſion." *Quincy, Ph.* p. 159. It is certain that its roughneſs is ſooner loſt by infuſion, than its bitterneſs; but that it cures agues after it has been decocted or infuſed, ſeems to be unqueſtionably true. Dr. Jo. Lermont tells me that ſome years ago when that diſeaſe was epidemical here, he uſed to powder the decocted bark, and cured many poor people with it.

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Does it not hence follow, that the virtue of the bark in agues is more owing to its fixed, than to its volatile parts. It is true indeed that it may be long, yea often decocted, and yet retain part of its bitterneſs: but it is as true, that the firſt decoction extracts ſo much of it, that if its energy was proportionably diminiſhed with the bitterneſs, the doſe of the decocted bark would be ſo great, that I do not ſee how its effect, in this ſtate, could have been diſcovered, nor how the ſick could ſwallow it down. But it is poſitively aſſerted by Mangetus, that it cures after it is rendered altogether inſipid, and *quaſi caput mortuum*, given in a large doſe. That an ounce of the decocted bark will be as effectual as an ounce not decocted, I cannot ſay; but I think it probable, that the doſe of the one need not be very much greater than that of the other, as will appear below. But the ſubſtances ſucceeding after decoctions, tinctures, &c. fail, demonſtrate its effects thus are not owing to its bitterneſs or ſtypticity remaining. To explain the manner of its operation therefore, its ſtyptic bitterneſs and acidity can be of no uſe, as might many other ways be demonſtrated. "Ecquis præter unicum Conringium, in ſa- "lubris hujus pharmaci parte terreſtriori, portiunculas quaſdam deleterias et "febriles, in ſubtiliori vero febrifugas deliteſcere, contra univerſalem expe- "rientiam, vel ſomniando hariolatus eſt? Febres ſane ſubſtantia corticis citius "ac certius, quam quacunque ſpecioſiſſima ejus tinctura, extracto, vel elixiri, "fugari, atque fugatas, ad recidivationem minus aptas eſſe, certo certius "conſtat." *Morton.* l. 1. p. 53.

7. That this moſt fixed, terreſtrial or woody part of the bark, appears to be altogether indigeſtible in the ſtomach; that is, not to be ſo diſſolvable as to enter the lacteals. For (α) if after the ague is ſtopped by it, the patient falls into a purging or vomiting naturally, or procures either by medicines for ſome weeks, the fever commonly returns; eſpecially if the bark was taken too ſoon. "Vitandæ ante omnia evacuationes qualeſcunque, cum vel blan- "diſſima catharſis, quin imo enema ex lacte ſaccharato, in morbi diſcrimen "certiſſime, forte in morbum ipſum denuo ægrum conjiciet. Etenim curatio "cum huic remedio innititur, purgatione nec eget, nec eandem plane fert." *Sydenh. epiſt.* 1. *reſponſ.* p. 306. "Ab uſu catharticorum, vires naturæ & an- "tidoti franguntur, & venenato fomite inde repullulante febris ſæpe numero "revireſcit, quod vel ab enemate cathartico, non tantum poſt quatuor dies, "verum poſt tot hebdomadas injecto, eveniſſe ſæpius memini. Quocirca a "corticis uſu, ego, niſi evidenti indicatione coactus, nuſquam intra quatuor "dies, ne quidem hebdomadas, vel menſes, donec, ex appropinquante ſole, "tempeſtas anni immutetur, ſolennem evacuationem inſtituere auſus ſum; "aut ſaltem facti me pœnituit, niſi toties quoties hoc malum, repentina cor- "ticis repetitione, averruncaſſem." *Morton.* l. 1. p. 69. About 18 years ſince, a ſtrong healthy man, aged about 30, was cured of a tertian by the bark. But after he had been eight days well, he took a vomit, and next day relapſed. He again got the bark, recovered, took a vomit about a week after, and the fever returned. Recourſe was had the third time to the bark, and with equal ſucceſs; and though a vomit was again adminiſtered, he continued well, is ſtill alive, and in good health. Was he the better or the worſe for the vomits? But moreover, (β) if I am not miſinformed, the powder has been vomited up 14 days after it was taken. A gentleman of good

ſenſe,

ſenſe, and whoſe veracity I never had reaſon to ſuſpect, giving an account of a ſwelling in his legs, which he was frequently troubled with, told me, that when he was in England he had long laboured under a quartan, and had ſtopped it with the bark many a time, for two or three weeks, taking large quantities of it; but after that he commonly grew ſick, and vomited, and the fever returned. And he aſſured me, that he frequently threw up the powder, little altered, 14 days after he had ſwallowed it; and that he was too well acquainted with it, having taken ſeveral pounds, to be miſtaken. However his quartan continued ſo long, that his conſtitution ſuffered much by it: for though not long after his returning to Scotland, he got rid of his fever, the effects of it continued many years. At length, he was ſeized with the gout, took a quack remedy brought from London, and died in exceſſive agony in two or three days.

Hence I infer, that in order to a compleat cure, it is commonly neceſſary the powder ſhould continue for ſome time in the primæ viæ; viz. longer or ſhorter, according to the nature and circumſtances of the fever; and alſo that it prevents the returning of one or more paroxyſms by acting, ſome way or other, on or in the ſtomach and guts.

8. That if after an ague has been ſtopped by the bark, it returns, the effect of the medicine is loſt as a ſpecific; and it will require as much to compleat the cure, as it would have done had he taken none of it before. Indeed, if the force of the diſeaſe is ſo far broken, that, when ſtopped, it would of itſelf ceaſe after a few paroxyſms and evacuations, cold or the like cauſes the relapſe; a much ſmaller quantity, with proper management, may compleat the cure. But I have obſerved, that when the bark is taken in the beginning of the diſeaſe, or ſooner than it ought to be, and the paroxyſms return, after a week or two's intermiſſion, they are then, eſpecially the firſt, more ſevere than ever, and require rather more of the powder to prevent a relapſe, than they would have done, had not the fever been interrupted. A remarkable inſtance I was witneſs to in 1728. A robuſt young man, about 25, had a regular tertian, ſuffered ſeveral paroxyſms, for which he took vomits, &c. and at laſt the bark, without my knowledge, and contrary to my advice. When I viſited him after it, he was quite free from the fever, and thought himſelf perfectly well. I told him I feared a relapſe, and the beſt way to prevent it, if poſſible, was to take another ounce of the powder in three or four days time, beginning the eighth day after the laſt fit. He followed this direction; yet, notwithſtanding he had taken about half the ounce in two days, the ague returned, and the firſt fit laſted, as he ſaid, twenty hours, and was ſo ſevere, that he thought he ſuffered as much in it as he would have done in all the fits put together which the bark had kept off. This made him patiently ſuffer, till I thought it ſafe to have recourſe to the powder, which then effectually cured. He is ſtill in perfect health, and never had the leaſt aguiſh ſymptom ſince. Vid. *Sydenh.* p. 263. where treating of the continued fever, ann. 1661, &c. he ſays, "Porro obſervatu dignum eſt, quandoque accidere, "ut æger clyſterum, aliorumve catharticorum uſu, circa declinationem morbi "intempeſtive præſcriptorum, parum alleviari videatur, imo nonnunquam "apyrexia omni modo frui; poſt diem autem unum alterumve ſenties, non "tam priſtinam febrem vires ſuas redintegraſſe, quam novam accendi; rigor

"nimirum

" nimirum atque horror ſubito invadet.—Cum ita ſe res habeat, non aliter " tractandus eſt æger, quam ſi antea febre non detentus fuiſſet," &c. Thus Sydenham.

May it not hence be inferred, that the ſpecific virtue of the bark in agues depends neither on its immediate action on the animal juices, as an alterative; nor on the morbific matter as an attenuant, either ſenſibly or inſenſibly? By its ſpecific virtue I underſtand that quality, by which, when duly adminſter'd, it certainly prevents the return of ſo much as one paroxyſm more; which quality is peculiar to the bark, and to it only when given in ſubſtance, ſo far as I know. The manner how it thus operates is what I have principally been inquiring after. If it cured agues only by degrees, it would not be ſo remarkable: bitters, &c. have done that long before it was known; though perhaps even thus its volatile part exceeds them all, yet ſuch effects being much the ſame in kind, may be called its common or leſs ſpecific virtue.

Now ſince it appears that the moſt ſpecific virtue of the bark is not lodged in its volatile but in its moſt fixed parts; that it ſometimes ſtops agues, or keeps off the paroxyſms only ſo long as it remains in the ſtomach, or in the inteſtines; and that relapſes, after taking it, deſtroy all its effects as a ſpecific; *Quæritur*, and I leave it to the learned to determine, whether the moſt ſurprizing and ſpecific virtue of this remedy does not ſolely depend on, or flow from, its action on the primæ viæ? And whether this action or impreſſion on the primæ viæ is not in ſome meaſure analogous to that of febrifuge cataplaſms, epithems, or ſuch-like applications on the ſurface of the body?

The affirmative perhaps will not ſeem altogether incredible to ſuch as conſider, that ſome remedies very oppoſite in nature, as well as others apparently very inſignificant in their operation, have been many times equally ſucceſsful in this diſeaſe. For agues have been cured by a ſurprize, or ſuch-like ſudden impreſſion on the mind; by abſtinence, as well as by exceſs; by irritating ſinapiſms, as well as by innocent plaiſters; by emetics, mercurials, bitters, aſtringents, &c. What a variety of remedies are uſed in Egypt in this diſeaſe! Vid. *Alpin. Med. Ægypt.* l. iv. cap. 15. fol. 146. *N. B. Dr. Simſon's* oculi cancrorum. And is it not as difficult to conceive how an external application, *e. g.* a cataplaſm to the wriſts, or plaiſter to the ſtomach, ſhould ſtop an ague, as how an internal one ſhould do it? The effect of the bark in clyſters is ſufficiently atteſted; and the late learned Dr. Dickſon told me he had often uſed it with ſucceſs in epithems. " An & ex- " terne quid valeat, ſi cum ſapone nigro in cataplaſmatis forma carpis appli- " cetur, quod haud ita pridem non nemo aſſerere non dubitavit, illud certo " prius confirmare non audeo, quam iteratis experimentis ex ipſa praxi ha- " beamus compertum.—Prorſus vero curioſum eſt in cyſteribus adhibitam " kinkinam eundem effectum edere, id quod haud ita pridem in peculiari li- " bro ex Italia mihi communicato, traditum & obſervatum fuit, cujus titulus " La Kina Kina, &c. Parma 1694." *Valentini.* l. c. p. 58. But it may be ſaid, if the indiſſolvable part of the bark applied in ſufficient quantity to the internal ſurface of the ſtomach, ſtops agues, or prevents the returning of the paroxyſms, why ſhould not every ſuch indiſſolvable ſtuff have the ſame effect? If exactly of the ſame texture, and denſity, and mechanical figure of its particles, when reduced to a powder, I own I ſee not a reaſon why it

ſhould

ſhould not. The ſtructure of the bark has in it ſomething ſingular, as deſcribed by M. Leeuwenh. l. c. who ſays, cinnamon in this comes neareſt to it of any bark he knew, yet ſtill there is a difference. However, if cinnamon, after all that is volatile or diſſolvable is drawn from it, given in powder is found to ſtop agues, it will confirm the former reaſoning. The experiment is ſafe, and worth the making. I wiſh alſo it were tried, whether aſh-bark, oak-bark, cortex elaterii, the lately imported cortex febrifugus Jamaicenſis, galls, or the like, decocted till they were altogether inſipid, and given in as large quantities as the cortex is, would prove ſuch febrifuges as it does. But, whatever is in this,

Daily experience proclaims the Peruvian bark to be the ſafeſt, as well as the moſt certain and efficacious febrifuge the Materia Medica can yet boaſt of, as well as a moſt valuable remedy in many other deplorable diſeaſes; its uſe in ſome of which is but lately diſcovered, and perhaps all its virtues are not yet known. In its volatile or diſſolvable part are centered the virtues or qualities of bitters, corroborating aromatics, antiſeptic balſamics, yea and cordial analeptics. For as Dr. Sydenham obſerves, in *Diſſert. Epiſt.* p. 412. from his own experience, "Peruvianus cortex eximias mirandaſque vires, in ſanguine & ſpiritibus confortandis invigorandiſque, habere nonnunquam deprehenditur, cujus (adds he) ℈j. mane & ſero ad ſeptimanas aliquot deglutitum ſanam firmamque corporis craſin (tam viris hypochondriacis, quam hyſtericis fœminis, diu multumque ægrotantibus, dejectâque jam quaſi corporis œconomia) reſtituiſſe ipſe obſervavi." This enters the lacteals, and though more ſlowly, yet as certainly, and perhaps always (at leaſt ſometimes) more ſafely cures intermitting fevers, than its more fixed part, becauſe it ſeldom puts a ſtop to the paroxyſms till it can be done with ſafety. The infuſion per ſe, or with other bitters, is not only ſufficient for the cure of moſt vernal agues, but is alſo of ſignal uſe in preparing the patient for the powder, even in autumnal quartans.

I hope I am not miſtaken as if I had aſſerted, that the bark continues always two weeks, or even one week, in the primæ viæ, and that if it be ſooner diſcharged, the fever will return: far from it. But what I think deduceable from obſ. 7 and 8. is, that it may ſtop an ague ſo long as it remains there in ſufficient quantity, and no longer; and alſo that the more obſtinate the diſeaſe is, and the ſooner the ſubſtance is given, its action on the ſtomach and inteſtines muſt be the longer continued in order to prevent a relapſe. Thus, for inſtance, whereas a vernal tertian, which would have gone off of itſelf, or with the help of bitters only, after a few paroxyſms, may require no more of the powder than is ſufficient to ſtop ſo many fits; yet an autumnal one, and much more a quartan, which might laſt many months, requires much more of the remedy, and the uſe of it to be much longer continued, to compleat the cure.

Were it neceſſary, I could give many inſtances of the ſucceſs and ſafety of this medicine, from my own experience, ſufficient to anſwer all the objections hitherto made, or that can be made againſt it. I have given it to infants, and been ſurprized to ſee how pleaſantly they took it, even in electuary: I have given it to a woman in the ſeventh month of her pregnancy; to a man about 70; in a word, to young and old of both ſexes, and always with as much

much ſucceſs as I could wiſh; all in agues, two of which were autumnal quartans, a diſeaſe rare in this country. "Ego fidenter dico, idque poſtquam "jam ad 25 annos quotidiano uſu ejus vires explorando expertus ſum, me "nuſquam noviſſe aliquid mali ab uſu corticis cuiquam eveniſſe præter ſur-"ditatem aliqualem tempore uſus moleſtam—quam ſponte ilico, a morbo "evicto, vel pulveris omiſſione ceſſare ſemper obſervavi." *Morton.* l. c. p. 51. I never knew any ill it did, if interrupting or protracting the fluxus menſium for a few weeks be not ſo called, which a woman's continuing to take it during the time that diſcharge ſhould have happened occaſioned, and which returned of itſelf without any bad conſequence.

Dr. Morton found the bark uſeful in the ſmall-pox, and frequently gave it in the declination of the confluent kind. Vide *Exerc. de Variolis*, cap. 10 & 11. *Hiſt.* 22, &c. And its ſucceſs in promoting the maturation of the puſtules, as well as in mitigating the ſecondary fever, has of late been frequently experienced. Vid. *Med. Eſſ.* vol. v. art. 10. Its effects in gangrenes and mortifications, though more lately diſcovered, are more fully confirmed by a variety of experiments. And in ſuch caſes, if the fever be duly moderated, the indicatio vitalis anſwered, and, where needful, proper topics applied, what more can be done to forward the cure? Now the bark, judiciouſly adminiſtered, both moderating the fever, and invigorating nature, and, as it were, embalming the juices, it is but a reaſonable concluſion, that it muſt be of great uſe wherever a laudable ſuppuration is wanted; of which we had not long ſince a ſignal inſtance in our infirmary. A man had his foot ſo bruiſed and cruſhed in a quarry that amputation was neceſſary: Two or three days after, the ſtump looked ill, ſpaſms and convulſions ſeized the muſcles of the face, and he appeared to be in great danger: Recourſe was had to the bark, which had the deſired effect, as in a few days all the bad ſymptoms went off, and the cure went on well.

But we muſt not hence infer, that the bark is proper or ſafe in continued fevers. Mr. Talbot is ſaid to have made the experiment; but little to his own credit, as it was fatal to the ſick. Vid. *Rem. Angl.* p. 93. "At in peſte atque "epidemicis continuis, quæ eandem ordine excipient, debellandis, non alios "effectus ex corticis peruviani uſu expectare licet, quam eos quos hodie "(1685) in pleuritide, peripneumonia, angina, & id genus febribus inflam-"matoriis videmus, quibus non tantum non prodeſt, ſed plane obeſt." *Sydenham. Epiſt. reſp.* 1. p. 317. I never knew it do any good in fevers with night ſweatings, unleſs they were aguiſh: And I have not tried it in the chin-cough, well knowing that the more efficacious a medicine is, there is the greater danger in miſapplying it.

The bark has been commended alſo in hectic fevers; but I do not know that ever it ſucceeded in that diſeaſe: yet I was witneſs to a very remarkable effect of it in a conſumption of the lungs, accompanied with ſuch a fever and groſs ſpitting, in a young lady about twelve years of age. As the laſt effort, an electuary with the bark in ſubſtance, and I think ſome balſamics in it, was ordered by Dr. Ecles, ſenior, (in 1710 as I remember). She had not taken it above a day or two at moſt, when the hectic frequency of the pulſe was quite removed, and I believe the night ſweats alſo; the expectoration

alſo was much diminiſhed. However, in a few days all the ſymptoms returned with more violence, and the apparent reſpite ſeemed only to haſten her death.

LECTURE XLIX.

SECT. III.

THE Peruvian bark is given in powder to ʒij, in infuſion or decoction to ʒß, in extract to ϑj. Of ſpirituous tinctures ʒj. cannot be well exceeded as a doſe, or at one time: or rather, the doſe being to be repeated ſometimes twice or thrice a day, it ought to be given in ſuch quantities, and at ſuch intervals, as the ſick can bear, and the diſeaſe requires.

But to be more particular: in intermitting fevers the doſe of the bark is of three kinds. 1. The quantity that can conveniently be taken at a time (with regard to which it differs not from other medicines of the like ſpecific gravity); ʒj. need ſeldom be exceeded. 2. The quantity ſufficient to prevent the return of the next paroxyſm; and this varies according to the genus of the fever, a quotidian commonly requiring at moſt pulveris ʒij. a tertian ʒß. and a quartan ʒj. Theſe divided into drachms, or into ſmaller quantities, and taken at proper intervals during the intermiſſion, will ſeldom fail to anſwer this intention, and give time to take the third doſe, that is, as much as is neceſſary to prevent a relapſe, or compleat the cure. In order to which, quotidians commonly require pulveris ʒj. tertians ʒij. quartans ʒiij. vel iv. including what was taken to prevent the firſt paroxyſm, and giving of what remains ʒj. or ſo, twice, thrice, or four times a day, till all be conſumed. And there being here more danger in the defect than exceſs, it is ſometimes neceſſary, and always ſafe, after a week or two, to repeat this third doſe once or twice in quartans. Smaller quantities indeed frequently ſuffice, much depending on the ſtate of the ſick, and of the fever. But if after all the ague returns, it is certain the bark has been given too ſoon: and without ſuffering the paroxyſms to continue for ſome time, and uſing other remedies, it will be in vain to attempt a cure by it, and much endanger the patient's conſtitution.—As for the quantity of it to be taken in decoction, &c. I can only ſay, that when an ague is thus to be cured, the uſe of it muſt be continued till that end is accompliſhed, be the quantity what it will.

The powder may be taken in wine, or made into an electuary or pills, as the patient likes beſt, and a glaſs of wine taken with every doſe. Any ſyrup may ſerve as a conſtituent, without any other addition, unleſs it be laudanum to prevent its purging. "Cum ſane, qui aliquid cortici adjiciunt, "præter vehiculum eidem in ventriculum tranſmittendo neceſſarium, aut ex "ignorantia peccant, ut mihi videtur, aut dolo malo, a quo vir probus ex animo "abhorrebit." *Sydenham. Epiſt. reſp.* 1. p. 308. The extract is drawn firſt with ſp. vini rect. and then with water. What is meant by ſalis tartari parum? *Ph. Ed.* 149. The *New London Diſpenſatory* takes water only, and repeats the decoction till the liquor remains tranſparent when cold: A tedious proceſs!

The *Cod. Medic.* makes the decoction in wine and water for two hours (in *edit.* 1748, water only is ordered, vide p. 56.) and once only. I would prefer digeſtion in brandy to them all.

That the bark may be too ſoon taken in agues I think is both conſiſtent with reaſon, and confirmed by experience. I know the contrary is the opinion of ſome learned phyſicians; for, ſay they, the longer the diſeaſe continues, the patient is the more weakened, the cure the more difficult, and the conſequences the more dangerous. And indeed if ſuch fevers were always hurtful to the conſtitution, and it ſuffered more by their continuing any time, than by their being ſtopped in the beginning, it could not be given too ſoon. But this is not the caſe: they are not ſeldom to be looked on as remedies, rather than as diſeaſes. As in the gout, the pain inflammation and ſwelling of the feet are not the main diſeaſe, but a critical metaſtaſis, in order to its cure; ſo intermitting fevers are commonly the inſtrument nature uſes, or the conſequence of the effort ſhe makes, to concoct or expel ſomething, which otherwiſe would prove more hurtful and perhaps fatal. And though this ſhould not be the caſe in every ague, yet certainly it is in ſuch as are properly called ſympathetic, where the ague is not the principal diſeaſe, but nature's attempt to cure it. In ſuch caſes nature is to be aſſiſted, not diſarmed, or deprived of theſe ſalutary paroxyſms, till the main enemy is overcome; and then ſhe will eaſily be prevailed on to quit her weapons, and the fever may ſafely be cured. Agues have rectified many faulty conſtitutions, and cured many obſtinate diſeaſes, which all the power of art could never otherwiſe have reached. Mr. A. K. a ſtudent in medicine, about 20 years old, in November 1724, was ſeized with a tertian. The firſt day he had a very regular fit; the ſecond he was quite free of the fever and very well; the third a paroxyſm ſomewhat more ſevere than the firſt; for it (or the third, I do not well remember which,) began with vomiting, which brought up more than a pound of undigeſted and mucous ſtuff; and then followed the cold, hot, and ſweating fits in their order. The free day following he took a doſe of ipecacuanha, which operated very well, but no mucus appeared. The next paroxyſm began as the foregoing did, with vomiting up an equal quantity of the mucous ſtuff; and thus he continued to do for ten or fourteen days, (uſing ſome bitters and a good diet all that time,) throwing up more or leſs of the mucus every fit. At laſt it diſappeared; and after a paroxyſm or two more, he being very deſirous to follow his ſtudies, I allowed him the bark, and he was very well all the winter. He had been for ſeveral years threatened every ſpring and autumn with a conſumption: on this account I adviſed, among other things, that if the ague returned, as probably it would do in the May following, he ſhould take care not to put a ſtop to it during the ſummer; but if it continued till autumn, or if it went off of itſelf ſooner, that he ſhould then take the bark, and it would confirm his health. About three or four years after, he came again to town, and told me that his fever had returned that May, that he had followed my directions, and been ever ſince in perfect health. His looks were ſo much altered for the better, that I ſcarcely knew him at firſt. Now could it have been of any advantage to this gentleman to have given him the bark ſooner in the autumnal, or in the beginning of the ſpring ague? Certainly not. It cannot, at the ſame time, be denied,

that the bark has been given with ſafety and ſucceſs in idiopathic agues in the very beginning, eſpecially when epidemical; but I always thought there was leſs danger in giving it later than was neceſſary, even in ſuch agues, than in giving it too ſoon: for as it is a good conſtitution indeed which cannot be made better, ſo I know no way we can diſcover, with ſo much certainty, the nature and tendency of the diſeaſe, as by a careful obſervation of its ſymptoms and progreſs during the courſe of ſeveral paroxyſms.

I ſhall conclude, as Dr. Willis does, with ſome remarks on the ſame ſubject. "Nunc autem hic pulvis Peruvianus ſit unicum adhuc repertum febris "quartanæ alexiterion, quod nimirum ipſius aliarumque intermittentium pa- "roxyſmos (licet ſolum pro tempore) inhibet: attamen dubitandum non eſt, "quin alia in rerum natura extent medicamina, quæ ſunt æque febrifuga; "atque ſperandum erit ut novi hujus inventi exemplo ducti, ad explorandas "herbarum virtutes adhuc fere ignotas excitemur: ita dum ſingularium ten- "tamini inſiſtimus, & medicinæ rationali, empirica adjungitur procul dubio "quartanæ, aliorumque herculeorum morborum curationes felicius procedent: "quod eo lubentius ſæculo huic, aut ſaltem poſteris ſpondeo; cum manu- "ducente corticis iſtius analogia, medicamentum ad profligandas febres non "contemnendi uſus, ipſe non ita pridem, varia præcurrens adinvenerim "quod etiam pauperioribus quibuſque, ſuccedanei vice, bono cum ſucceſſu, "propinare ſoleo." *Willis de Feb.* cap. 6. The bark has likewiſe taught us, that where ʒj. or ʒij. only gives reſpite for a time, ounces will make a cure. If therefore other alteratives were given in ſuch quantities, it is not improbable that greater cures might be performed by them. "Cl. D. D. Eliſha Coyſh, "vir integerrimus, & medicus expertiſſimus, ſæpius ſincero animo mihi aſſe- "ruit, ſeſe vires florum chamæmeli, ſubtiliſſime pulveriſatorum, in vehiculo "convenienti exhibitorum, atque poſt debita intervalla repetitorum, æque "felices ac certas in hoc morbo debellando expertum fuiſſe, ac ipſius corticis "Peruviani." *Morton. de Feb.* c. 6. p. 43. Who likewiſe ſays, that by a powder made flor. chamæm. p. ii. ſalis abſinthii, & antimon. diaphor. āā p. i. he cured three intermitting fevers on which the bark had no effect, the only inſtances in which he ever found it fail. Wormwood-ale, made by infuſing the abſinthium vulgare in ſmall ale, cured many country people, when the ague was amongſt us. And it is not improbable that many other bitters, eſpecially if ſubaſtringent, as cortex fraxini, chamædrys, &c. given as the bark is, might prove very ſucceſsful in this as well as other diſeaſes. *Sed extra oleas feror.*

TAMARISCUS.

SECT. I.

Tamariſcus, tamarix, & myrica *offic.* tamarix altera, folio tenuiore, ſive Gallica. *B. P.* 485. Tamariſcus Narbonenſis. *Lob. Ic.* 218. *Adv.* 447. *Ger.* 1378. *F.* 661. T. folio tenuiore. *Park.* 1479. Tamarix major, ſive arborea Narbonenſis. *J. B.* i. 2. 350. *R. H.* 1704. Myrica ſylveſtris prim. *Cluſ. H.* 39. The French or Narbon tamariſk.

It grows in South-France, Spain, &c. with us it flowers in May and alſo in autumn. The lignum & ſummitates are reckoned medicinal, but not ſo much uſed as the bark. "Ter plerumque in anno floret, vere, æſtate & au- "tumno; recentibus floribus, ſemen jam evaneſcens, ſp. ſuccedentibus. *Cluſ.* "*H.* l. c. Edmundus Grindal Archiep. Cant. tamaricem indurati lienis "paſſionem eximie juvare expertus, primus in Angliam tranſtulit." Vide *R. H.*

It is a pretty thick dark-brown bark, ſomewhat reddiſh within, of a bitteriſh ſtyptic taſte, and no ſmell except when muſty.

It is in Latin myrica, *æ*, myrice, *es*, tamarice, & tamarix: in Greek μυρικη. Vid. *Theophr.* l. i. c. 16. *Dioſcor.* l. i. c. 116. p. 60. "Tamarix vi- "detur Germanicæ originis, ut larix; hinc tamariſcus Græcis eſt μυρικη, "unde Virgilius celebrat humiles myricas. Apud Nicandrum corripitur "media." *Hoffm.* 450. It had many odd epithets among the ancients, as fragilis, ſterilis, infelix, damnata, triſtis, &c. Of it were made garlands for criminals, as a mark of infamy. Vid. *Bod. in Theoph.* p. 407.

SECT. II.

It is an aſtringent, called deobſtruent, diuretic, and ſplenic; and commended for fluxes, obſtructions of the viſcera, eſpecially of the ſpleen, diſeaſes ab atra bile, hæmorrhages, &c. "Lignum ad frigiditatem inclinat.—Cortex calfacit "& ſiccat, attenuat, aperit, abſtergit, ſubaſtringit, diureticus eſt, ac ſpleni- "cus. Uſus præcipuus eſt in obſtructione & tumore lienis (quem abſumere "ſcribit Dioſcorides,) in morbis ab atra bile & ſero oriundis, ut ſcabie, pru- "ritu, in ictero nigro, profluvio albo mulierum, &c. Extrinſecus imprimis in "tinea capitis, & obſtructione menſium (inſeſſu). Præparationes ſunt, 1. Ex- "tractum è cort. 2. Sal ex incinerato ligno." *Schroder.* 690.

It is not very bitter, but pretty ſtyptic, and makes ink with vitriol. "Datur ad ſanguinis excreationes in potu; cœliacis quoque & fæminis pro- "fluvio laborantibus, icterícis.—At foliorum decoctum in vino potum "lienem liquat.—Sunt & qui e caudice calices parent, quibus poculorum "vice ſplenetici utantur, ceu datus in ejuſmodi vaſis potus lieni conferat." *Dioſcor.* l. 1. c. 116. p. 60. "Ad lienem præcipua eſt, ſi ſuccus ejus expreſſus "in vino bibatur. Adeoque mirabilem ejus antipathiam contra ſolum hoc viſ- "cerum faciunt ut affirment, ſi ex ea alveis factis bibant ſues, ſine liene in- "veniri." *Plin.* l. 24. c. 9. p. 614. And it is ſaid, that ſtill they make veſſels of the wood, to hold the drink of ſplenics, in Germany, Egypt, &c. The Arabians commend it for the elephantiaſis; and hence it is uſed in Egypt for the French pox. Vid. *Alpin. Plant. Egypt.* p. 37. *Veſlin. in Alp.* p. 13. "The bark is ſometimes uſed for the rickets in children." *Miller Bot.* p. 432. It may be given in infuſion or decoction to ʒß. but the doſe is not determined.

THURIS.

THURIS.

SECT. I.

Cortex Thuris, Cortex Elaterii, Eleutheriæ cortex, Styrax rubra, Thymiama Indiacum, & Thus Judæorum, *offic.* Storax rubra officinarum, *B. P.* 452. Thymiama, ſive Storax rubra officinarum, *J. B.* i. 481. Cortex Thuris nonnullis dictus, vel Thymiama, vel Thus Judæorum, quod Judæi in ſuffumigiis frequenter utantur. Eſt corticoſum quid ex India allatum, *R. H.* 1841. Thymiama (officinis corrupte Thymiana, vel Thuris cortex, vel Thus Judæorum, quod Judæi in ſuffumigiis frequenter eo utantur.) *Schroder*, 692. "Styrax rubra, Græcis hodie Maurocapno. *Bellon.*" *B. P.* "Schakarilla, Chakarilla, *Mont. Exot.* 8. Cortex Thuris *offic.* Elaterii Pharmacopol. vel Elatherii cortex." *Dale*, 346. Indian bark. D. Eleutherian bark.

"Alia eſt kinæ kinæ ſpecies, quæ kina kina aromatica, caſcarilla, ſhacarilla & cortex Peruvianus griſeus, zagarilla, in officinis noſtris dicitur Eleutheria, *H. Cliff.* 486. Vulgo chacril vel caſcarille. Cortex Eleuterii, *Stiſſeri.* Primus qui de hoc cortice mentionem fecit, eſt *Joan. Andrea Stiſſerus*, M. D. & P. in Acad. Julia, qui in actorum laboratorii chymici ſpecimine ſecundo, an. 1693. edito, refert, &c." Vide *Geoff.* ii. 202. "Eleutheriæ cortex, bark of Eleutheria." *Pemb. Diſp.* p. 131.

It is a moderately thick bark, commonly in quills, rough and greyiſh without, iron-coloured within; of a hot biting, bitter reſinous taſte, and perfumed aromatic ſmell: its ſmoak ſmelling of muſk.

The tree probably grows in both the Indies. There is a ſhort deſcription of an elutheria in *H. Cliff.* 486: but I find it not in *Lin. G. Plant.* either firſt or ſecond edition; nor in *Syſt. Naturæ, edit.* 1748. But in his *M. M. & Fl. Zeylan.* it is a ſpecies clutiæ, and called clutiæ foliis cordato-lanceolatis, *Fl. Zeyl.* 174. *M. M.* 166. *Sp. Pl.* 1042. & eluteria. N. triviale.—"It is an unknown Peruvian plant." *Hiſt. Acad. R.* 1719. "Ex India orientali ad nos tranſportatur, nobis autem importatur ex inſula *Bahamenſi* Americana Elatheria dicta." *Dale*, 346.—"Ex quibuſdam Americæ meridionalis regionibus ad nos affertur, præſertim ex illa regione quæ *Paraguay* dicitur." *Geoff.* ii. 202.—I had it from Eleutheria or Cignateo, one of the Lucaya or Bahama iſles, which abounds in it.—"Some reckon ſix ſpecies of the quinquina, and call the chacril the ſeventh. It is alſo called kina-kina ſpuria, falſa, urens, odorifera. It is cortex elaterii with the druggiſts on account of its biting bitterneſs, like the elaterium: Chacril from the Spaniſh chacarilla or caſcarilla." *H. Acad.* l. c. p. 67.—Dioſcorides's deſcription of the narcapthum or naſcapthum agrees well enough with this bark: but I cannot ſay to it only. Vide l. i. c. xxii.

SECT. II.

It is a ſtimulating diaphoretic, diuretic, carminative, bitter, aromatic, ſialagogue, cordial, and uterine (may be called nervine) and is of ſignal uſe in

in diſeaſes from an inertia ſolidorum, or a phlegmatic viſcidity of the fluids. Hence it is commended in the palſy, dropſy, vapours, aſthma, colic, ague, &c. but little uſed here. It may be given to ℈j. in ſubſtance.

" Thymiama conſtrictionibus vulvæ ex ſuffitu prodeſt. Odoris jucundi gratia & ſuffimentis immiſcetur." *Schroder*, p. 692. " Naſcaphthum, aliis nar-
" capthum etiam ex India defertur. Eſt vero corticoſum mori libro ſimile;
" quod jucundi odoris gratia ſuffitur. Factitiis ſuffimentis inſeritur vulvam
" quoque aſtrictam ſuffitum juvat." *Dioſc.* l. i. c. xxii. totum.

Obſerve, 1. It is a very acrid, aromatic and bitter ſubſtance. A little of it ſmoaked, with tobacco in a pipe, perfumes the place, as with muſk, but makes it more intoxicating, and is apt to cauſe headaches. " Odore dum
" comburitur, fragrantiſſimo, aromatico, ad ambari odorem aliquantiſper ac-
" cedente." *Geoff.* ii. 202.—2. It is very reſinous, or balſamic. " An ounce
" of it yielded to ſp. vini ʒv. of a biting, bitter, aromatic, reſinous extract of
" a fine purple colour; and the remaining more fixed or earthy part of the
" bark weighed only ʒij." *Hiſt. Acad. R. anno* 1719, p. 68. So ʒj. was loſt?
—3. It is commended in too many diſeaſes. " Mr. Fagon often uſed the
" chacril with ſucceſs, in agues: leſs ſufficed than of the kinkina, and its
" uſe needed not to be ſo long continued. Apinus, M. D. and P. at
" Altorf, ſeems to be the firſt who uſed it in tincture or infuſion in epidemic
" and catarrhous fevers, and in ſubſtance in common fevers. Mr. Stahl, the
" King of Pruſſia's phyſician, extended its uſe to pleuriſies, peripneumonies,
" and convulſive coughs called quintes. Mr. Bolduc experienced its virtue in
" flatulent colics, and vapours. (*N. B.* If ſubtiliſing the humours only be
" required, the tincture ſuffices; if corroborating the parts be alſo indicated,
" the ſubſtance is preferable.) Chacril in ſubſtance alſo contributes to make
" the hæmorrhoids run. But its great ſucceſs in the dyſenteries in 1719,
" whether accompanied with a fever or not, is moſt remarkable. The ipeca-
" cuan here loſt much of its honour, and the chacril gained it. For whereas
" the ipecacuan (as well as other vegetable emetics) weakened the ſtomach,
" and left a laſting feebleneſs behind it, the chacril recovered it ſoon to full
" vigour." Thus *Hiſt. Acad. R.* l. c. Vide *Geoff.* ii. p. 202-208, where you will find, that according to Jo. Junckerus it does not anſwer in febribus malignis & contagioſis, though he commends it in omnibus inflammationibus excepta angina, in doloribus, hæmorrhagiis internis, vomitu cruento, lochiis nimiis, hæmoptyſi, as anodyne, &c. For my part I think it evidently hurtful in all hot inflammatory diſeaſes, and all hæmorrhages. " Datur pulvis
" a gr. vj. ad ℈ß. vel ℈j. Infuſum ad ʒß. vel ʒj. Eſſentia ſeu tinctura cum
" ſp. vini, a gut. x. ad xx. Extractum a gr. iij. ad vj. vel viij." *Geoff.* ii. p. 208.

WINTERANUS.

SECT. I.

Cortex Winteranus, Cortex Magellanicus verus. Canella alba, *offic.* Cinnamomum, ſive Canella tubis minoribus alba, *B. P.* 409. Canella alba quorundam, *Cluſ. Ex.* 78. *J. B.* i. 461. Arbor baccifera, laurifolia, aromatica, fructu viridi calyculato, racemoſo, *Sloan. Cat. Jam.* p. 165. *Hiſt.* ii. p. 87.

Phil.

Phil. Tranſ. N°. 192. p. 465. Canella alba, *Park.* 1581. *R. H.* 1802. Caſſia lignea, Jamaicenſis; cortice acri, candicanti, *Pluk. Phyt.* 81. The wild cinnamon-tree. White cinnamon, vulgo Winter's bark. Winterania, *H. Cliff.* p. 488.

It is a pretty thick bark, commonly in quills, of a yellowiſh white colour both without and within, the cuticle being grated off; of a hot biting aromatic, and bitteriſh taſte, and fragrant ſpicy ſmell. It has more the flavour of cloves than of cinnamon. "Sapore acri, aromatico, odore fragranti." *Dale.* "It is of a hot aromatic biting taſte a little bitteriſh." *Miller*, 106. "Sapore acri, pungente, aromatico, quaſi mixto ex cinnamomi, zingiberis "& caryophylli ſapore; odore fragranti." *Geoff.* ii. 174. It grows in Jamaica, and other parts of the Weſt Indies, and is a large tree.

William Winter, captain of one of the ſhips which accompanied Sir Francis Drake, *anno* 1578, to the Streights of Magellan, returning in 1579, brought the bark of ſome trees he had cut down there, to Europe. Hence Cluſius called it Cortex Winteranus. It is the laurifolia Magellanica, cortice acri, *B. P.* 461. Vide *Dale*, 296. But it is now a ſtranger in Europe; and inſtead of it is kept the canella alba which was firſt brought home about the year 1600. "Ante paucos annos (before 1605.) cœpit exoticus cortex inferri, cui "nomen canellæ albæ indiderunt." *Cluſ.* l. c. If it was not the ſame with what he had ſent him from London in 1591, and came from Virginia.—Now although the canella alba, is very different from the cortex Winteranus as authors deſcribe it; yet ſome are of opinion the difference is owing to the *locus natalis* only; vide *Cat. Jamaic.* and it is agreed that their virtues are much the ſame. Sir Hans Sloan ſays, the taſte is much the ſame of both, and that either may be uſed as a ſuccedaneum for the other; but that the true W. bark is much more aromatic. Vide *Phil. Tranſ.* N°. 204. p. 924. And hence their names became ſynonyma in foreign as well as Britiſh Diſpenſatories. But the error was too great to be overlooked by the London Committee, and cort. Winteranus is thrown out of the new Materia Medica. "Some of our apo-"thecaries call the canella alba, cortex Winterani, and have uſed it for the "coſtus in the mithridat." Vide *Park.* p. 1652, where he deſcribes both theſe barks as they had them then.

SECT. II.

It is an acrid ſtimulating diaphoretic, diuretic, cordial, ſtomachic, carminative and ſcorbutic; may be called nervine, and be uſed in all cold and plegmatic diſeaſes. It is commended for weak and windy ſtomachs, the ſcurvy, dropſy, palſy, ague, &c.

"Calfacit, ſiccat, ſpecificum eſt in ſcorbuto; vomitiones reprimit, paralyſi "quoque medetur." *Dale*, p. 296. & 300. "Maxime laudatur in ſcorbuto, "febribus intermittentibus, & morbis chronicis, quibus præcipue prodeſt vi "ſtomachica inſigni." *N. Belg.* 90.—For 1. It is hot biting and bitteriſh like horſeradiſh, (more than zedoary to which it is compared by ſome) but aromatic, and not ſo volatile; keeping well and long.—2. It contains an aromatic heavy oil; and ſeems to partake of the virtues of redcole, cloves, and lemon-peel. "It has a flavour not greatly unlike a lemon-peel: it is a warm

"aromatic

" aromatic drug, ſubtile and penetrating, and ſoon ſenſible to the nerves." Vide *Quincy* 77. " Saporis eſt acris, piperati, ſubamari, quaſi ex caryophyl- " lis, cochlearia & tantillo cinnamomi compoſiti; odoris fragrantis." *Herm. M. S.* 3°. Winter's crew uſing it as a ſpice, found it beneficial in the ſcurvy. " Iſtius corticis facultates nullas exploratas habebat, ſed eo recente " melle condito, ut acrimoniam deponeret, vel reſiccato & in pollinem trito, " ut in eduliis canellæ aliorumque aromatum vicem ſuppleret, utebantur, " qui ea navi vehebantur. Poſtea tamen intelligebam, adverſus ſtomacacis " ſive ſcorbuti morbum, quo illorum nonnulli in ea navi affecti erant, non in- " feliciter uſos fuiſſe." *Cluſ. Exot.* p. 75. And this Mr. Handiſyd confirms. Vide *Phil. Tranſ.* No. 204. for October 1693, p. 923. " Canella alba utun- " tur indigenæ in obſoniis, & ciborum condimentis, piperis & caryophyllo- " rum vice." Vide *Geoff.* ii. 176.

SECT. III.

It may be given in ſubſtance to ʒß : In infuſion to ʒj. An aromatic water and eſſential oil may be drawn from it. It enters the aqua raphani compoſita, and tinct. rhei dulcis.

" Diſtilled per veſicam it yields an aromatic oil, ſinking to the bottom of " water, like oil of cloves, with ſome ſmall quantity of which being mixed, " it has ſometimes been ſold for true oil of cloves." *Phil. Tranſ.* No. 192. p. 467, for Jan. and Febr. 1691. " Datur in ſubſtantia a ℈j. ad ʒß. vel ʒj. " in infuſo ad ʒij." *Abin. M. S.* " It is given in powder from ℈j. to ʒß. in " infuſion from ʒj. to ʒij. in aquæ cochleariæ ℥v. or vj." *Chomel.* 549. " Doſis a ℈ß. ad ʒj. in ſubſtantia, ad ʒij. in infuſione. Ejus uſus bilioſis & " calidis naturis noxius eſt." *Geoff.* ii. p. 176.

Of the MEDICINAL WOODS.

AGALLOCHUM, and ASPALATHUS.

SECT. I.

1. Agallochum, lignum aloes, & Xyloaloe *offic.* Agallochum officinarum, *B. P.* 393. *B. H.* 1808. Lignum aloes officinarum, & Agallochum pleriſque putatum, *J. B.* i. 477. Agallochum, *Garc. Cluſ. Exot.* 172. A. ſive lignum aloes, *Park.* 1564. A. ſeu lignum aloes, calambac Indis dictum, *Bont. in Garz.* 5. Lignum aloes vulgare, *Ger.* 1622. " Sinkoo, vulgo Japonum " Kavoriki, *i. e.* lignum ſeu arbor fragrans; Siamenſibus Kiſſina; Latinis " arbor aquilæ & aloes dicta; cujus fragrans lignum appellatur Agallochum. " *Kæmpf. Amœn. Exot.* 903." *Dale*, 347. Lign-aloes, or wood of aloes.

The lign-aloes of the ſhops is a hard, ſolid, heavy wood in ſmall pieces, of a yellowiſh brown colour with interſperſed dark purpliſh veins, of a warm, bitteriſh, aromatic, reſinous taſte, and when burning of a fragrant ſmell.

But that this is the beſt, or even the true lign-aloes, though brought from the Eaſt Indies, cannot be aſſerted; for it is valued there as much as gold itſelf; and it was reckoned among the moſt valuable of the magnificent preſents, with which the King of Siam's ambaſſadors complimented Lewis XIV. of France in 1686. Vide *Savary Dict.* i. 73. "I have ſeen with Mr. Tradeſcant, the elder, before he died, a great piece of true lignum aloes, and of the beſt ſort, as big and long as a man's leg, without any knot therein, which, as he ſaid, our King Charles gave him, with his own hands; but was here kept before, and accounted by many, as a great religious relict, even to be a piece of the wood of that croſs whereon our Saviour was crucified, and therefore was fetched away again from his ſon, to be kept as a monument or relict ſtill. So fond are ſome of mere impoſtures, and to believe lies." *Park.* 1565. Among the rarities of the Royal Society there is, "A piece of lignum aloes, with its own gum growing upon it, given by the Honourable Mr. Boyle. The taſte of the gum is perfectly like to that of the wood. The colour like that of the pureſt and moſt lucid aloe called ſuccotrina: for with the light reflected, it looks almoſt like pitch: with the light tranſmitted, it glitters like a carbuncle; powdered, it is of a reddiſh yellow. This or ſome other aromatic gum is the aloe of the Hebrews, whence the other from ſimilitude hath its name." *Grew's Rar. R. S.* p. 179.

For the different ſorts of this wood, various accounts of the tree it belongs to, &c. I refer you to *Dale*, *Geoffroy*, *Kæmpfer*, and the authors quoted; and only obſerve that the true or beſt lignum aloes, called calamba, calambak, or tambac, is to be found in none of the ſhops in Europe: neither can I tell whether all that is ſold for it comes from the ſame, or from different trees. "The aloes-tree grows in China, in the kingdom of Lao, and in Cochinchina. The trunk is of three colours, which make three ſorts of wood, different both in nature and quality. Immediately under the bark, it is black, compact and heavy; and on account of its blackneſs, called by the Portugueſe *Pao d'Aquila:* this is not to be found in France, except in the cabinets of ſome of the curious. Next under that, the wood is of a tawny colour, light, veinous, and reſembles rotten wood. This is the calambouc wood, and the only true wood of aloes, which the druggiſts of Paris can furniſh. In fine, the heart of the trunk is the precious tambac or calembac wood, dearer in the Indies than gold itſelf: and which made the rareſt part, *an grê de Siamois*, and moſt eſteemed of the preſents they brought to Lewis le Grand, from their maſter, the King of Siam. This and the firſt are too rare for the druggiſt; and many of the woods to which they give the name of aloes-wood, are counterfeits, *bois ſuppoſés*, without virtue or value." Vide *Savary Dict.* i. 73. Can the ſap of any tree, be more valuable than the wood within it? Who informed him ſo?

This wood is called ἀγαλλοχον, ab ἀγαλλομαι, *exulto*, *gaudeo*, according to ſome. "Agallochum lignum eſt quod ex India & Arabia deportatur, thyino ligno ſimile, punctis maculiſve diſtinctum, odoratum, guſtu quodammodo aſtringens, cum quadam amaritudine, cortice veſtitum cutis inſtar molli, & aliquantulum verſicolare." *Dioſcor.* lib. i. c. xxi. p. 19. "Agallochum Dioſcoridis, ξυλαλον Græcorum recentiorum. Hoad, agalugi

&

" & agallugum Arabum: agallochum, Xylo-aloes, & lignum aloes, *offic.* " Lignum aquilæ, lignum paradiſi, & lignum ſanctæ crucis Quorundam. " Lignum eſt reſinoſum, odoratum, prorſus diverſum ab aloe, ſucco amaro " cathartico, in officinis uſitatiſſimo. Neque etiam eſt lignum arboris ex qua " ille ſuccus ſtillat, ut quidam exiſtimaverunt." *Geoff.* ii. 214. Few think ſo now; but many that it is uncertain whether the agallochum and hyloaloe be the ſame; and whether what we have in the ſhops deſerves the name of either.

Aſpalathus *offic.* " Aſpalathum *offic. Mont. Exot.* 7. Agallochum præ- " ſtantiſſimum. *Jonſ. Dendr.* 460. *B. P.* 393. Calambac wood. Fruſta ſunt " lignoſa & bituminoſa, ligno aloes laxiora & craſſiora, colore pallidiora, ſa- " poris amaricantis, pinguis & reſinoſi, odoris debilioris. Ex India orientali " ad nos tranſportatur.——Similes habet virtutes cum agallocho (pro quo " frequenter venditur) ſed debiliores." *Dale*, 347. Aſpalathum lignum. Belgice Ligter Paradiisſhaut. *Pharm. Leiden*, (edit. 1718.) p. 9. Ἀσπάλαθος, Dioſcoridis: Ξυσιστκηπτρον Quorundam: Aſpalathus Plinii: Darſiſahan Arabum, *Geoff.* ii. 218. who adds, " Res eſt prorſus ignota in officinis noſtris; " & ſi quæ ſub aſpalathi nomine occurrunt lignea fruſta, inter ſe prorſus di- " verſa ſunt, & incertæ originis. Neque mirum, cum etiam veteres de hoc " ligno inter ſe diſſentire videantur, &c." Vide a pag. 218. ad p. 222. In the old *London Diſpenſatory* the aſpalathus is the ſame with lignum Rhodium: The new one has thrown out both agallochum and aſpalathum, retaining however lignum Rhodium.

The aſpalathus of the Dutch ſhops is a ſolid, hard, heavy wood, in fragments partly blackiſh, and partly yellowiſh and ſometimes veined, of a biteriſh reſinous taſte and little ſmell. " Lignum aſpalathum præcipue diſtin- " guitur a ligno aloes odore & ſapore debiliore, colore fuſco-rubicundo ver- " gente ad flavedinem, huic inde partibus albicantibus junctis, vires habet " L. aloes, ſed debiliores." *Nucl. Belg.* p. 172.

" Authors are not agreed about the true aſpalathus. In effect three ſorts " of wood are ſo called. 1. A blackiſh wood, which many think, and not " without probability, is the lignum aquilæ, whereof the ſmell is ſtrong. " 2. The wood of a little prickly tree, heavy, ſolid, oily, of a purpliſh ſpeckled " colour, acrid bitter taſte, and pretty odoriferous. It comes near to the " lign-aloes in weight, taſte, ſmell and virtues; and they are often in com- " poſitions ſubſtituted the one for the other. 3. The lignum Rhodium, " which ſome alſo confound with the lignum Cypreum. Some add a 4th " ſpecies, which has an aſh-coloured bark and red wood, and ſmell like and " as ſtrong as caſtor." *Savary, Dict.* i. 164.

SECT. II.

They are probably all ſtimulating, diaphoretic, and diuretic; are called cephalic, cordial, ſtomachic, and uterine, and commended in many diſeaſes. I can affirm nothing concerning any of them. The lign-aloes was an ingredient in the pulvis diambræ; but this compoſition is omitted in *Pharm. Edinb.* edit. 1744. The aſpalathus is ordered in the trochiſci cypheos pro mithridatio,

& magma hedychroi: but for it we direct ſantalum citrinum, ſo that neither are ever uſed here.

" Agallochum, 1. calfacit & ſiccat. 2. Confortativum eſt omnium viſce-
" rum, ac præcipue cerebri, cordis ac uteri; ſpiritus vitales ac animales re-
" creat; hinc medetur lypothymiæ; amaritudine ſua lumbricos necat. Ex-
" terne creber ejus uſus eſt in cucuphis, & epithematibus cordialibus. Præp.
" ſunt, 1. Extractum cum ſp. vini, cujus doſis a gr. iv. ad x. 2. Species
" diaxylaloes. 3. Trochiſci diaxylaloes." *Schroder.* 527. whoſe aſpalathus is lignum Rhodium. Lignum aloes eſt egregium analepticum & ſtomachicum,
" excitat menſes & ſudores, valet ad dyſenteriam & alios fluxus alvi, ad li-
" pothymiam & cachexiam." *Nucl. Bel.* 171. where the aſpalathus is made only weaker. " Lignum aloes revera oleo eſſentiali uberrimo pollet, quod
" diſtillationis ope extrahi poteſt: in lipothymia, ſyncope & paralyſi conve-
" nit. A quibuſdam ad memoriam firmandam laudatur: apud Anglos ad
" podagram & rheumatiſmum ſanandum plurimum commendatur. Ejus
" ſubſtantia a ϑß. ad ʒß. exhibetur. Decoctum propter amarorem raro præ-
" ſcribitur. Tinctura ope ſp. v. a ʒß. ad ʒij. Oleum eſſentiale a gut. iii. iv.ve,
" ad xx. exhiberi poteſt." *Geoff.* 218. He obſerves, that according to Bontius ejus ϑj. cures the cholera and kills worms; and that it is the beſt ſuccedaneum for the aſpalathus. V. p. 220.

The ſantalum citrinum, which was alſo the ſuccedaneum *Ph. Lond.* for the aſpalathus, is as liable to exception as this is. Were it of any conſequence, the cortex eleutheriæ would do better: but there not being in mithridatii ʒj. aſpalathi $\frac{1}{15}$ grain, and in as much theriacæ not $\frac{1}{5}$ gr. it might well be left out altogether, as is now done at London. Vid. *Cod. Medicament.*

ASPALATHUS ROSEUS.

SECT. I.

Aſpalathus odore roſeo, lignum rhodium, *offic.* aſpalathus albicans, torulo citreo. *B. P.* 392. *Ger.* 1624. Lignum roſæ odoris, aliis lignum thuris, aliis aſpalathus. *J. B.* i. 472. *R. H.* 1809. Aſpalathus, *Lob. Adv.* 427. Rhodium lignum, aſpalathus. *Schrod.* 661. Roſe-wood, or rhodium, is a ſolid, hard, heavy, yellow wood, with a white ſap, of a ſoft reſinous taſte, and pleaſant ſmell, like a roſe.

Mr. Dale deſcribes two ſorts of it, as kept in the ſhops, viz. that above, and the aſpalathus colore buxi. *B. P.* 392. *R. H.* 1809. though Mr. Ray makes it the ſame with the other, and Miller mentions only one; perhaps different parts only of the wood of the ſame tree, whether of the trunk or root. " Ex inſulis Canarienſibus & aliunde affertur." *Dale* 346. " This
" wood, or root rather, comes from the Canaries." *Miller. Bot.* 58. " It is
" got from a very tall and ſtrait tree, which grows in ſeveral places of the
" Levant, in Martinico, Cyprus, Rhodes; hence called lignum Rhodium,
" & lignum Cyprinum." *Lemery Dict.* 310. " It is very common in the
" Antilles, grows very high and ſtrait. The wood takes an admirable poliſh,
" is of a fillemot colour, and very ſweet-ſmelled. The Dutch draw a very
" odo-

" odoriferous oil from it, which druggists sell by the name Oleum Rhodium." *Savary Dict.* ii. 1432. In a word, authors are not agreed about this wood: the name coming from the smell, and that being perhaps the chief characteristic, there may be several woods so called. " Rhodii ligni, sive aspalathi " Rhodii quibusdam putati historia, nobis non minus obscura & intricata vi- " detur quam aspalathi veterum." *J. B.* Vid. *Dale* & *Geoff.* ii. 220—222.

SECT. II.

It is probably diuretic and antiseptic, but used only as a perfume, or for its scent; the raspings in sweet-bags, the oleum in pomatums, soap-balls, &c. The oleum Rhodii was in the balsamum ad apoplecticos, but is omitted in the last edition (1744) of our *Dispensatory*.

" Dioscoridi & Galeno calfacit & siccat, & astringit, unde commendabile " ad ulcera oris, ad nomas genitalium & sordida ulcera, ad alvi fluxus. Ve- " rum enimvero an hæc nostrati conveniant, cuivis licet experiri. Vix enim " modernis practicis in usu est: nisi quod interdum ad renum calculos de- " coctis incoquatur. Præp. Oleum stillatitium. quod communiter pro oleo " rosarum habent." *Schroder.* 661. " Ligno, sicut ejus oleo essentiali, cor & " cerebrum roborandi vis tribuitur." *Geoff.* ii. 222.

The common rose-wood is not acrid, but contains a soft aromatic balsam, which is drawn from it by distillation in the form of a transparent liquid oil. Le Mort, or rather Muykens, in the *Col. Chym. Leid.* p. 363. gives the process accurately. " ℞ Ligni Rhodii rasi q. v. maceretur in s. q. aquæ salsæ " per duos aut tres menses; dein f. per vesicam distillatio, addito tartari crudi " m. i. vel ii. Dein oleum ab aqua s. a. separa. Externe odoriferis inservit, " interne diuresin movet. Dosis interne ad gut. x."—Thus *Col. Chym.* l. c. Is so long maceration necessary?

COLUBRINUM.

SECT. I.

Lignum colubrinum *offic.* Lignum colubrinum, *Garziæ*, *Clus. exot.* 214. *Acostæ*, *ib.* 276. *R. H.* 1806. & 3. *Dendrol.* p. 83. *J. B.* ii. 169. *Bont. in Garc.* fol. 9. b. " Nux vomica minor, Moluccana, lignum colubrinum offi- " cinarum. *Par. Bat. prod.* 357. Solanum arborescens, Indicum; foliis na- " pecæ majoribus, magis mucronatis; fructu rotundo, duro, spadiceo-nigris- " cente; semine orbiculari compresso maximis. *Breyn. prod.* ii. 93. *Commel.* " *Flora Mal.* 249. Nux vomica altera. *R. Dendr.* 117. Fructus orbicularis " peregrinus; cum granis nuci vomicæ similibus. *J. B.* i. 341. Modira- " Caniram. *H. Mal.* viii. 47. t. 24." *Dale* 327. Snake-wood is a solid, heavy wood, of a whitish (or oak-wood) colour, acrid and very bitter taste, without smell; it is covered with a brown bark, with many ash-coloured spots on it, and comes from the East Indies in pieces, sometimes as thick as one's arm.

There are ſeveral ſpecies of it in authors; Garcias has three; Acoſta three. *B. P.* 7. p. 301. They are ſaid to grow in Ceylon by Garcias; in Malabar by Acoſta; in Timor by Herman. M. S. and to be deſcribed only in the *H. Mal.* by *Albin. M. S.*—The ſeed of ſome of the ſpecies is called Nux vomica *offic.* Nux vomica in officinis. *B. P.* 511. Nuces vomicæ. *Ger.* 1546. Nux vomica. *Park.* 1601. *R. H.* 1814. N. vomica vulgo officinarum, compreſſa, hirſuta. *J. B.* i. 339. "Nux vomica, major, & officinarum. *Par. Bat.* "*prod.* 357. Malus Malabarica, fructu corticoſo, amaricante, ſemine plano, "compreſſo. *D. Syen. R. H.* 1661. Solanum arboreum Indicum, maximum, "foliis œnopliæ ſive napecæ majoribus, fructu rotundo, duro, rubro, ſemine "orbiculari compreſſo maximis; nuces vomicas, & lignum colubrinum offi-"cinarum ferens. *Breyn. prod.* ii. 92. *Comel. Fl. Mal.* 249. Malus Indica "venenata amara, nucleis argenteis compreſſis, orbiculatis, Ghodhakadura; "nux vomica officinarum. *Herm. Muſ. Zeylan.* 41." *Dale* 327. — Vomic nuts are flat, round ſeeds, about $\frac{1}{2}$ of an inch broad, $\frac{1}{4}$ thick, of a greyiſh colour, downy a little on the outſide, hard and horny within, of a very diſagreeable bitter taſte and no ſmell. Vid. *Miller Bot.* 316. "Cum in duos "orbiculos funduntur, uterque in orbis circumferentia, exiguum foramen ha-"bet, quo continetur ut annotat Cordus, germinaturæ plantæ rudimentum, "exiguo pediculo, duplicique folio conſtans." *J. B.*—So this is neither a root nor a muſhroom, as ſome have imagined. Akin to theſe is

Faba Sancti Ignatii *offic. Dale* 328. Faba febrifuga, & faba Sancti Ignatii *offic. Geoff.* ii. 458. Nux pepita, ſeu faba Sancti Ignatii. *Ph. Tranſ.* No. 249. p. 44. Igaſur, ſeu nux vomica legitima ſerapionis camelli. *Ph. Tranſ.* No. 250. Vid. *Abridg.* vol. ii. p. 648—652. "Igaſur, ſeu nux vomica, legitima ſera-"pionis camelli; faba Sancti Ignatii vulgo. *R. Dendr.* 118. Cucurbetifera "malabathri foliis ſcandens, Catalongay & Contara Philippinis orientalibus dic-"ta, cujus nuclei pepitas de Byfayas, aut Catbalogan, & faba Sancti Ignatii "ab Hiſpanis; Igaſur & Mananaog, *i. e.* victorioſi, inſulanis nuncupati. "*Pluck. Mont.* 60." *Dale* 328. Saint Ignatius's bean is a ſeed about the bigneſs of a nutmeg, roundiſh, ſomewhat triangular and heart-like, downy on the outſide like the nux vomica, and of the ſame conſiſtence, but blacker within, and of a bitter taſte and no ſmell, brought from the Philippine iſlands.

"Faba Sancti Ignatii eſt fructus magnitudinis circiter nucis moſchatæ, fi-"guræ cordis gallinæ, externe tectus pellicula tenui, coloris gryſei, ſub qua "continetur ſubſtantia ſpadicei coloris, quæ difficile frangitur, ſed facile ra-"ditur ut cornu, & tunc ſpirat odorem gratum; ſaporis eſt amari." *Nucl. Belg.* 111.

It came into the Dutch ſhops but about the latter end of the laſt century. Lemery ſays it was a Spaniſh Jeſuit who firſt diſcovered it to the Portugueſe merchants, and called it faba Sancti Ignatii, (from Ignatius Loyola, who founded their order in 1535.) *Dict.* 215. "Paucis ab hinc annis, illos adhuc "incognitos nucleos, Luſitani patres S. I. miſſionarii ex Philippinenſibus "inſulis attulerunt. *Geoff.* ii. 458. Michael Bernardus valentinus, Archiater "Haſſiacus, & medicinæ profeſſor, qui primus de hoc nucleo diſſeruit, trac-"tatu de polychreſtis exoticis, & nuperrime in hiſtoria ſimplicium reformata, "teſtatur, &c." *Geoff.* ii. 461. "Valentini Polychreſta exotica in curandis

"affectibus

" affectibus contumaciſſimis probatiſſima, faba ſcil. S. Ignatii, ipecacuanha, " china chinæ, clyſter tabaccus, &c. was printed Francofurti ad Mænum, " 1700. in 4to." *Segmer. B. B.* p. 307. According to *Segmerius*, p. 184. whether the nut or ſeed treated of by Sir Hans Sloane in the *Phil. Tranſ.* No. 150 and 349, and by P. Hotton, No. 257, be the nux vomica, or nux metel ſerapionis, let others determine; I cannot. Vid. *J. B.*

SECT. II.

The lignum colubrinum appears to be a virulent and dangerous cathartic; though called alexipharmac, and commended for agues, bites of venomous creatures, worms, &c.

Vomic nuts and Ignatius's bean, I think, are of the ſame nature, and can recommend the uſe of neither of them. They have no place among our ſimples, and I mention them only to caution you againſt the raſh uſe of them.

" Lignum colubrinum calidum eſt & ſiccum (ut amaror arguit) abſtergit, " morſibus ſerpentum, aliiſque venenis medetur: bilem ac mucilaginem per " alvum (nonnunquam per vomitum) educit: unde uſus præcipuus eſt in " febribus intermittentibus, tertiana ac quartana; lumbricos necat ac fugat. " Extrinſecus maculas cutis abſtergit. Præp. Extractum cum aqua." *Schrod.* p. 569. " Eſt ſtomachicum, anthelminticum, & febrifugum; aliquando " vomitus, ſeceſſus, & diureſim movet. Datur ad ʒß in infuſo." *Nucl. Belg.* 172.

" Nux vomica narcotica eſt, virulenta, & opio deterior. Canes, feles, " corvos, &c. cum cibo exhibita interimit, vomitumque ciet. *Dale* 327. " Ingreditur quaſdam compoſitiones alexipharmacas. Quadrupedibus eſt ve- " nenum, & hominibus ſuſpecta." *Nucl. Belg.* 210. I know of no phyſical " uſe theſe nuts are applied to, they being narcotic and poiſonous, and only " uſed to deſtroy cats, dogs, &c." *Miller B.* 316.

" Faba S. Ignatii veneno reſiſtit, febres quartanas curat, urinam & menſes " provocat; vertiginem inducit, & vomitiones ciet." *Dale* 328. " Vim ha- " bet roborantem & ſtomachicam; conducit optime ad febres præcipue in- " termittentes, in quibus datur media hora circiter ante paroxyſmum ad ϑß; " laudatur etiam ad pleuritidem ſpuriam, vertiginem, epilepſiam, paſſionem " iliacam & diarrhœam." *Nucl. Belg.* 112. " Noviſſime increbuit uſus fabæ " quam vocant di Sanct. Ignatio; dicitur & Igaſur, & Faba di S. Nicholas " & de cava longa. Semen eſt amariſſimum. Ad movendos ſudores, & de- " bellandas febres præcipuum creditur, & diarrhœæ, dyſenteriæ, colicis dolo- " ribus, morbis convulſivis, ipſique epilepſiæ mederi, & externe admotum " ſcabiei; celebratur cum primis & ejus virtus alexipharmaca." *Hotton.* l. c.

But, 1. Snake-wood is not only exceſſively bitter, purgative and emetic, but occaſions ſuch ſymptoms, as ſufficiently evince its malignity. " Hujus " ligni uſus non eſt niſi annoſioris, recens enim primo anno maniam, tormina, " hinc vomitum, & tandem convulſiones excitat." *Herman. Cynoſ.* p. 235. " Ex obſervationibus *Antonii de Heide*, obſ. 53. p. 121. vi virulenta, ſoporoſa " ac maligna, hoc lignum præditum eſt; hinc non tutum eſſe affirmo interne " exhiberi. Ad febrem quotidianam ſedandam (inquit) ligni colubrini pul-

" verem aſſumpſit tornator quidam circa veſperam, ſubſequente nocte ſatis " bene habuit, ſed mane ſurgere vel corpus movere ſatagens, ſentiebat tre- " morem in membris: accerſitus exhibui mixturam hypnoticam, & intra pau- " cas horas tremore liberatur æger. Ejuſdem ligni ʒß. aſſumpta a muliere " cachectica, præter tremorem excitavit & ſtuporem, ita ut ægra nullius rei " curam haberet, neſciens (ut mihi retulit) ſe eſſe in mundo, vel vivere. Cu- " ratur mixtura hypnotica. Retulit mihi illuſtris domina famulum ſuum, ab " aſſumpto hoc ligno, per aliquot dies inſtar fatui extitiſſe hæc penſiculans et " conferens cum ſymptomatis a nuce vomica in cane excitatis, obſ. 50. exa- " ratis, libenter ſubſcribo aſſerenti, nucem vomicam eſſe fructum ligni colu- " brini." *Dale* 328. (whom Geoffroy tranſcribes,) who omits, after *membris*, and after *vivere*, the cure; as well as after *extitiſſe*, the author's inference. Vid. *R. H.* p. 1808. 2. It is not certain, that all the wood ſold under this name is from the ſame tree, or of the ſame nature. The ſnake-wood indeed is much commended by Garcias, Acoſta, Bontius, &c. But ſome things related concerning it ſmell ſtrong of fables: *e. g.* the combat between the little ferret-like animal called quil, or quirpele, and the ſerpent cobras de capelo, in Ceylon, recorded by Garcias, believed by Bontius, but reckoned, and juſtly, a fable by Mr. Ray: yet this is ſaid to have diſcovered its virtues againſt the bites of ſerpents, or its being an antidote. " And therefore (it is) better let " alone and neglected, as it is in our ſhops." *Miller, Bot.* 146.

The nux vomica is commonly known to be a ſtrong and ſudden poiſon to ſeveral animals, and that in a very ſmall quantity. Geſner gave to a dog nucis vomicæ ʒß. with fleſh: in a quarter of an hour it fell a-ſleep, ſuffering various convulſive motions, and in four hours died. Another dog, to which he gave the ſame quantity, after ſuffering very dreadful ſymptoms for about three hours, recovered by taking antidoti ſaxoniæ Morbani ʒß. and that without vomiting. Vid. *J. B.* who made the ſame experiments. See alſo thoſe made by *Ant. de Heide Centur.* obſ. 50. p. 116. or *R. H.* p. 1804. But, above all, *Wepfer de Cicuta Aquatica*, p. 194—219. deſerves to be peruſed, on account of his accuracy in relating all the phænomena, and the uſeful conſequences he thence deduces in the annexed ſcholia, p. 210, &c. From which it appears, that the nux vomica cauſed all the ſymptoms, particularly convulſions, epileptic fits, and death itſelf, by its action on the ſtomach immediately: for it commonly killed before any of it was expelled the ſtomach; occaſioned convulſions in a ſhorter time than appeared to be neceſſary to take a tincture from it and convey it into the blood; the blood was nowhere coagulated; and neither the ſpirits nor the nerves ſeemed affected. And yet the ſtomach itſelf was not corroded; nay, even ſometimes, as appeared in ſome animals killed by it, the ſtomach was not ſo much as inflamed in any part of it; and where it was inflamed, it was not in the part where the nux vomica lay, which, as De Heyde obſerves, was only a little ſoftened, and no more altered, than if the parts of it had only been infuſed as long in warm water. Hence, as I long ago noticed, the effect of poiſons does not always flow from their action on the blood, or on the ſpirits; neither on their corroſive acrimony; the nux vomica, &c. acting none of theſe ways. However much therefore this nut or ſeed may be commended by ſome; though even Ludovicus prefers gentian

mixed

mixed with tantillo nucis vomicæ to the cortex in agues, (Vid. *Pharm.* ejus. p. 113.) P. Albinus (in M. S.) ſays, "In maniacis, nucem vomicam a "gr. ii. ad viii. ſæpius dedi, ad quietem conciliandam, quod non ſemel ſuc- "ceſſit, cum nullis opiatis aliquid efficere potuiſſem;" and though it was an ingredient in the famous electuarium de ovo, (Vid. *Ph. Ang.* p. 263.) yet ſtill its virulency is too evident to be doubted. Vid. *Arſenicum.*

"Cum poſt terrorem pridie conceptum 1635, in autumno peſte corriperer, "ſtatim potio bezoartica a D. Jo. Burgowero præſcripta fuit, exhauſtam proti- "nus evomui, ſubſequente magna anxietate, & ſumma virium proſtratione ut "de me actum crederetur. D. parens meus de vita mea ſollicitus, medico pe- "riculoſe ægrotante, portiunculam el. de ovo in aceto rutaceo ſolutam, propina- "vit: mox obdormivi, tota nocte ſudavi. Mane ſurrexi vegetus, emergente ſub "axilla dextra bubone parvo, qui citra ſuppurationem, aut ulteriorem decu- "bitum, aut uſus medicamentorum evanuit, pleneque per Dei gratiam con- "valui." *Wepfer. Cicut.* p. 211. "Si enim ſemel bene ſucceſſit, non ob id "tutum eſt experimentum. Neque deſunt contraria. Quæ cauſa mihi fuit "hactenus, cur electuario de ovo Maximiliani I. Imper. obtruſo ab impu- "dente quodam empirico, nunquam uti voluerim. Ut in politicis, qui ſe- "mel malus ſemper præſumitur talis, ita in medicina, non utar incertis, cum "certa præ manu habeo." *Hoffman.* p. 402. — "Succus ex foliis caniram "expreſſus, ac in decocto datus, capitis dolores ſedat; largius epotus veneni "vires habet, mortem inducens; in ſtercore hominum comeſto ſalus eſt *E.* "*H. Mal.*" *R. H.* 1661.

As for the faba S. Ignatii, it has much the ſame taſte and conſiſtence with the vomic nut, and its effects are the ſame. For Father Camelli tells us of one to whom he gave only fabæ ℈j. who "ſtatim ac ſumpſiſſet, tre- "more totius corporis, trium horarum ſpatio perſiſtente, una cum pruritu, & "vellicationibus convulſivis horrendis, ut pedibus inſiſtere nequiverit, quæ "in maxillis vehementiores erant, ac magis moleſtæ, ita ut quodam modo "ridere cogeretur, correptus fuit; nullo inſequente vomitu." Of another, who ſuffered the like, and "una cum (ſays he) ſumma præcordium anguſtia, "vertigine, animi deliquio & ſudoribus frigidiſſimis. Hic nucem recentem "integram devoraverat. Cui oxymel & oleum, cum tepida exhibendo, quo "plurimum viſcoſi phlegmatis, cum nucis particulis rejecit, opem tuli."— See more inſtances of ſuch-like ſymptoms following the uſe of it. *Phil. Tranſ.* l. c. & *Geoff.* ii. 459.

SECT. III.

The doſe of the ſnake-wood is ſaid to be to ʒß. in infuſion, by Herman and Geoffroy; though perhaps ʒß. would be too much of the powder. The vomic nuts have been given to gr. viii. and S. Ignatius's bean to ℈j. but ℈ß. is too much. I would not adventure on gr. v. of any of them.

"The chief uſe the nux vomica is put to is to kill dogs and cats, crows, "ravens, and other creatures; or upon pleaſure to ſtrew thereof upon fleſh "a little ſprinkled over with aqua vitæ, tied faſt to ſome ſtake or other "ſuch-like thing, which will make them, after they have eaten thereof, ſeem "as it were drunk.—Some give inwardly 3 or 4 gr. of it." Vid. *Park.* 1602.

LECTURE L.

GUAIACUM.

SECT. I.

GUAIACUM, lignum ſanctum, lignum vitæ, *offic.* Guaiacum, magna matrice. *B. P.* 448. Guaiacum. *Ger.* 1611. *R. H.* 1685. Guaiacan, lignum Indicum dictum. *Monard. Cluſ. Exot.* 312. Guaiacum, ſive lignum ſanctum, lignum vitæ. *Park.* 1586. G. Jamaicenſe, lentiſci ſubrotundis foliis, læte virentibus, flore albo. *Pluk. Phyt.* t. 35. Pruno vel euonymo affinis arbor, folio alato, buxeo, ſubrotundo; flore pentapetalo, cœruleo, racemoſo; fructu aceris cordato, cujus cortex luteus, corrigatus, ſemen unicum majuſculum nigricans, nullo officulo tectum, operit. *Sloan. Cat. Jam.* 186. *Hiſt.* ii. 133. Guaiacum, pockwood, or lignum vitæ, is a hard, ſolid, heavy wood, of a dark brown colour, with a yellowiſh ſap, of a ſubacrid, bitteriſh, and ſomewhat aromatic taſte, and pretty fragrant and agreeable ſmell, when raſped or heated; covered with a pretty firm aſh-coloured bark, ſpotted and compoſed of ſeveral laminæ, of a ſubacrid bitter taſte, and little ſmell if not muſty.

It grows in Jamaica, Hiſpaniola, and other parts of the Weſt Indies. The red wood keeps well; but the more recent, and the more reſinous it is, it is reckoned the better. Some diſtinguiſh between the guaiacum and the lignum ſanctum, or guaiacum propemodum ſine matrice. *B. P.* But probably they are only varieties; or the difference is owing to age or place. Sloane makes them one and the ſame. Monardes ſays, a Spaniard of Saint Domingo was the firſt of the Europeans who experienced its effects in the lues venerea, (being taught it by an Indian ſervant); and who made it known to his countrymen, who ſoon brought it to Europe.

The learned Freind, (*Hiſt.* ii. 365.) writes thus concerning it. "A little "before this, the great ſpecific guaiacum had been introduced into Europe, "and was ſoon in that high repute, as to be put in competition at leaſt with "mercury, nay, and for ſome time to carry the vogue far beyond it. Gon- "ſalvo Ferrand firſt imported it. He had been infected himſelf at the ſiege "of Naples; and meeting with no cure in Italy, went to the Weſt Indies, "with a deſign to find out how the inhabitants there treated themſelves in a "caſe which he knew was ſo familiar among them, and as common as the "ſmall-pox was in the European nations. A circumſtance very remarkable, "that the ſame country ſhould furniſh both the diſeaſe and the antidote, "and the one within a few years of the other. And this is a proof at the "ſame time, that it was a diſtemper entirely new, and imported from the "new-found world, in the manner I have already related; elſe what could "have carried this man back to the Weſt Indies for a cure? When he had "informed himſelf of the remedy, (which there univerſally ſucceeded, and "the more ſo perhaps becauſe the climate was hot, and the way of living "very temperate), he teturned to Spain, and ſet up for a practiſer himſelf

" in this new diſtemper, and gained as great riches by his method, as the " mercurial doctors by theirs. I ſuppoſe he might make a monopoly of it; " for it appears, that ſome time after it was ſold for ſeven gold crowns a " pound." Gonſalvi Ferrand Owietenſis de guajaco ligno tractatus unus, & de ligno ſancto, tractatus alter, are among the authores varii de morbo Gallico, p. 355.

SECT. II.

It is an attenuating antiſeptic, diaphoretic and diuretic, of a bitteriſh aromatic taſte, and its reſin is purgative. It is called a ſpecific for the lues Gallica, and commended alſo in the ſcurvy, gout, rheumatiſm, and almoſt all chronical diſtempers. The bark is of the ſame nature as the wood, but weaker, and leſs reſinous. — " Lignum calfacit & ſiccat, ſudorem ac urinam " largiter promovet, adeoque ſanguinem mundificat, putredini reſiſtit. Uſus " præcip. in arthritide, hydrope, catarrhis, aliiſque morbis a phlegmate tar- " tareave mucilagine, aut flatibus oriundis: peculiariter ac ſpecifice curat " luem Gallicam. Cortex minus calidus eſt quam lignum. Gummi (reſina) " mihi communicavit A. Sonnemann, idque cum felici ſucceſſu aliquoties in " curando L. G. fuiſſe adhibitum affirmavit. Sapore eſt acri, colore ac figura " laccam fere repreſentante, pellucidum, friabile. Præparationes ſunt, 1. De- " coctum. 2. Extractum gummoſum. 3. Oleum rectificatum quod fit deſtil- " latione. Doſis gr. iij. v. in L. G. 4. Spiritus, qui acidulus eſt. 5. Sal, ex " cinere." *Schroder*, 599.

1. It is pretty acrid, aromatic, and bitteriſh, as appears more in the taſte of a ſtrong decoction, than of the wood itſelf. It is alſo reſinous, yet ſo as to yield its reſin by long boiling to water. " Lignum ſaporis acris, amaricantis, " odoris aromatici." *Dale*, 331. " Saporis acris & piperati." *Nucl. Belg.* 172. " Sapore ſubamaro, nonnihil aromatico, miti acrimonia palatum ac fauces " compungente; odore, dum incaleſcit aut uritur, fragrante non ingrato. " Cortex ſapore acri, amaro ingrato." *Geoff.* ii. 224. 2. Chymically analyſed, guajaci ℔iv. (64 ounces) yield phlegmatis & ſpiritiis acidi ℔ij. ʒvij. olei ʒvß. carbonis ℔j. ʒiij. & inde ſalis fixi ʒiv. vel vj. ſo ʒß. only is loſt: according to *Lemery* (*Chym.* p. 579.) who ſays the ſpirit turns ink with vitriol. " Aqua " (viz. that which riſes firſt) erit acidula, limpida, penetrans, odorem ſapo- " remve guajaci vix exhibens, nidorem ſub-ambuſti dans, atque harengi fu- " mati parum æmulans: aqua ſecunda erit rubella, acidior, nidoroſa magis, " haleces fumatos fortius exprimens, aliquidem empyreumatici exhalans, " acrior longe." *B. Chem.* ii. 135. See proceſs xxxii. p. 133—139. 3. Its principles are very fixed; nothing flying-off in decocting but inſipid water, ſcarcely if at all acid, which *Lemery* rejects as uſeleſs. Hence the decoction, wherein both ſalts and ſulphurs are diſſolved, is a penetrating attenuating, antiſeptic, diaphoretic and diuretic liquid. By the liberal, and long continued uſe of which, ſweating, and a proper light and ſpare diet, an intire change of the conſtitution may be effectuated; and ſeveral chronic diſeaſes cured. Hence, 4. It is ſo much commended, and in the Indies eſpecially ſo ſucceſsful in the French pox, as well as in many other diſeaſes; though perhaps extolled ſomewhat out of meaſure. " In morbo Gallico curando nullum eſt medica-

" mentum eo præſtantius & certius," ſays *Monardes*; who after an account of the introduction of the diſeaſe into Europe, and how the wood is to be uſed, adds, " Hæc eſt optima ſumendæ aquæ guayaci ratio, qua multi deſperati " morbi curantur: atque illa aqua non eſt præſtantius ullum remedium ad curan- " dam luem veneream, cujuſcunque tandem ſit generis: radicitus enim eam " extirpat. Convenit item hydropicis, aſthmaticis, epilepticis, morbis veſicæ " & renum, doloribus junctūrarum, omnibus morbis ab humoribus frigidis & " flatibus procedentibus, & diuturnis quibus inutilia fuerunt ordinaria medi- " camenta; præſertim ſi morbum Gallicum ſubſequantur.—Dentes etiam con- " firmat & dealbat hæc aqua, ſi ſæpius ea colluantur." 5. The reſina guajaci purges pretty briſkly: though authors generally overlook this quality, *Miller* does not. " The gum or roſin is ſomewhat cathartic, and a good purge in " rheumatic caſes, to the quantity of ℈ij. mixed with the yolk of an egg, " and given in a convenient vehicle. It is likewiſe good for the ſcurvy, and " ſerviceable againſt ſcabby breakings out, and other deformities of the ſkin." *Miller*, *Bot.* 221. Guaiaci optimi ℔ j. dat reſinæ ſolidæ ʒx. ℈ij. circiter.

" Guaiacum lignum, cortex, gummi — operantur per ſudores & diureſim; " ſpecifice valent ad luem veneream, & omne ejus ſatellitium, ad ſcorbutum, " paralyſim, rheumatiſmum, arthritidem, hydropem, fluorem album, aſthma, " cachexiam, ulcera maligna, ſcabiem, & morbos cutis pruriginoſos, & cæte- " ros morbos chronicos, in quibus adeſt lenteſcentia humorum. Ingreditur " ordinarie decocta ſudorifera ad aliquot uncias. Fit oleum empyreumati- " cum, reſina, tinctura, præcipue ex ejus cortice: ejus gummi ſpecifice valet " ad gonorrhœas malignas; datur ad ʒß." *Nucl. Belg.* 173.

" Analyſi chymica ex guaiaci ligni nigricantis & reſinoſi in ſcobem redacti " ℔ v. extractæ ſunt phlegmatis tum acidi tum alcali ℔ j. ℥xij. ʒiij. quarum " prima portio ℥v. (fere) ligni odore & ſapore, mere ſalis alcali, urinoſi no- " tas præbuit, ſiquidem ſublimati corroſivi ſolutionem turbidam & lacteam " effecerit.—Ultimæ ℥xviij. magis ac magis acidæ guſtu prodierunt, ac tan- " dem heliotropii tincturam igneo colore infecerunt. Nihilominus tamen ſa- " lem alcalinum ſemper manifeſtarunt, *ſcil.* ſublimatum corroſivum ſolu- " tum præcipitando. Cum his liquoribus prodierunt olei nigricantis, adinſtar " ſyrupi craſſi, aqua gravioris ℥ix. ʒviß. Olei tenuioris flaveſcentis & aquæ " ſupernatantis ʒiv. Carbonis pondus fuit ℔ ij. ℥j. ʒvij. Jactura fuit ℥vij. " ʒviß. — Cinis albicans ex carbone diu calcinato pendebat ℥ij. ʒvj. gr. xii. " ex quibus cineribus ſalis fixi non mere alcalini, ſed ſalſi ʒj. gr. lxii, lixivia- " tionis ope, extracta fuerunt." *Geoff.* ii. 228, &c. where are alſo the analyſes alburni, & etiam corticis guaiaci, which differ much from one another; as they all widely do from that given us by *Lemery*, as appears from the following table.

Analyſi Chymicâ Guaiaci ℔ v. *dedere.*

		Phlegmat.	Olei.	Carbon.	Ciner.	Sal fixi.
		℥. ʒ. gr.	℥. ʒ. gr.	℥. ʒ. gr.	℥. ʒ. gr.	℥. ʒ. gr.
Ligni.	*Lem.*	48 : 6 : 00	6 : 7 : 00	23 : 6 : 00		00 : 5 : 00. al.
Ligni.	*Geoff.*	28 : 3 : 00	10 : 2 : 36	33 : 7 : 00	02 : 6 : 12	00 : 1 : 62. ſa.
Alburni.	*Geoff.*	31 : 2 : 18	06 : 6 : 36	23 : 3 : 36	01 : 4 : 66	00 : 2 : 02. ſa.
Corticis.	*Geoff.*	24 : 1 : 32	08 : 3 : 64	29 : 4 : 54	13 : 6 : 60	00 : 7 : 12. al.

" Spiritus

" Spiritus guaiaci becomes black like ink, when a little vitriol is diſſolved " in it. It does not ferment with ſp. vitrioli, or other acids, neither ſenſibly " with alcaline liquors; but ferments a little with dry alcaline ſalts and crabs- " eyes: it does not render the ſolution of ſublimate corroſive turbid; but red- " dens the tincture of turnſole: all which ſhew that acidity predominates in " this ſpirit." *Lemery, Chym.* 579.

" Mirum ſane hac in analyſi mediam tantum partem principiorum guaiaci ex- " trahi. Necnon obſervatu dignum eſt hujus carbonem, etiam poſt duos treſve " dies aeri expoſitum, ſtatim exardeſcere, nullo admoto igne; modo peracta " diſtillatione, retortæ collum accurate obturetur, & vaſa furnuſque per ſe refri- " geſcant.—Ex hac analyſi ſequitur hoc lignum conſtare ex ſale acido vitrio- " lico, oleo & terra ſtrictiſſime unitis." *Geoff.* ii. 229. I don't ſee the conſe- " quence. " Cortex vero guaiaci a ligno, tum principiis tum principiorum " mixtione, multum diſcrepare ex analyſi chymica demonſtratur.—Unde recte " concludi poteſt, utriuſque vires diverſas eſſe, nec indiſcriminatim uſurpari " debere; quod peritiorum medicorum uſu, & experientia confirmatur."— (But this concluſion is not ſo plain to me.) — " C. Hoffmannus, Matthiolus, " Fallopius, corticem ligno longe inferiorem eſſe autumant. Fernelius vero, " majorem vim ſiccandi, attenuandi, ac ſudores promovendi ipſi tribuit; ve- " rum nimis calidum eſſe, & jecoris calida ſiccaque intemperie laboranti & " febricitanti multum noxium exiſtimat. Revera quod Fernelius ſapore corti- " cis ligno acrioris & amarioris detexerat, quodque experientiâ multâ compe- " rierat, nobis analyſi chymicâ comprobatum videtur." *Geoff.* ii. 232. But the bark is evidently neither ſo reſinous, nor ſo aromatic as the wood; does not keep ſo well, and is commonly inferior to it: And indeed if the wood has half the virtues Mr. Geoffroy gives it, I think we may do without the bark in all caſes. As for the analyſes, there is reaſon to ſuſpect their accuracy; and I can draw no good conſequence from them.

" Guaiacum craſſa incidit & attenuat, lenta detergit, obſtructa aperit & " liberat, ſudores provocat, urinas ciet, ſputa adjuvat, ſtomachum reſolutum " corroborat, ſicut & alia omnia viſcera: diuturnas & inveteratas jecoris & " lienis obſtructiones, icterum, hydropem, aliaque vitia ex iis nata curat: " omnium corporis partium ſuperfluos humores frigidos diſſipat, atque abſu- " mit: capitio deſtillationes exhaurit; ex iiſque natos dolores rheumaticos " dictos, tollit: podagram, chiragram, iſchiada, omnemque arthritim mire " juvat; aſthmaticos, paralyticos, ſtupidos, & quovis modo reſolutos curat: " nervorum affectionibus omnibus ſubvenit: tumores omnes frigidos & duros " ad ſuppurationem perducit; ulcera cacoethea & chironia ſiſtit, exſiccat & " cicatrice obducit. Lues venereæ puſtulas, tubercula, ulceraque omnia, at- " que omnes ex iis natos dolores, aliaque ſymptomata, nullâ corporis noxâ, " nullaque virium jactura, cohibendi ac tollendi vis & facultas ei tribuitur. " Et re quidem ipſâ calidis in regionibus, huic morbo debellando ſufficit, " modo ut decet curatio inſtituatur. Verum frigido ſub Jove ubi corporum " perſpiratio minor eſt, & difficilius promoveri ſolet, minus tuta medicina " deprehenditur. Eam ob rem in hujus morbi curatione guaiaco hydrargyrum " conſociant." *Geoff.* ii. 232. Vide *Hoffman*, p. 301—307, which may per- haps ſerve inſtead of the many treatiſes we have on this wood, in the Aphro- diſiacus, or authores varii de morbo Gallico.

SECT. III.

It is given in decoction to ʒj. The reſina to ʒß. We keep neither eſſential oil, tincture nor extract; but prefer the reſina made here, to that roſin brought from America, called gummi guaiaci, becauſe much cleaner. Oleum externe utitur. The wood, which muſt be raſped down, requires long decoction before it is diveſted of all its virtues: yea it will ſuffer ſeveral decoctions: for the extract the *New London Diſpenſatory* orders ligni raſi ℔ j. to be boiled four times or oftener, in a gallon of water ad dimidium. "Et ſcri-"bunt quidam, etiam duodecies decoctum; curaſſe tamen pauperculos quoſ-"dam; habet enim balſamum tenaciſſimum, ut iſti loquuntur." *Hoffman*, p. 306. §. 31.

The method of cure of the French pox with guaiacum was this. The patient being firſt well purged, was confined to a cloſe warm room; and early in the morning, in bed, drank ʒx. of a ſtrong decoction of it (in which to the quantity raſuræ ʒij. or iij. and ſometimes iv. had been boiled); and, almoſt ſmothered with cloaths and heat, ſweat two full hours: four hours after he dined on raiſins, almonds, and ſea-biſket, uſing for common drink a ſecond decoction of the ſame raſuræ. Eight hours after this meagre repaſt, he again took decocti fortis ʒx. ſweating two hours after it. And ſo he went on every day, for fifteen days: on the 16th he was purged; then returned to his ſweating diet, for fifteen, twenty, or more days. He was then allowed to put on his cloaths; had a little more liberal diet; and was again purged: but ſtill he was obliged to drink the decoction, and be under a ſtrict regimen for other forty days, or till cured. Vide *Monard. Cluſ. Exot.* p. 313. Hence it appears that the cure depended more on the regimen, than on the medicine. Raſuræ ʒj. is enough to make of a ſtrong decoction; ʒviij. or xii, if macerated firſt, and then decocted in aquæ ℔ iv. ad ℔ j. Our decoctum lignorum is not ſo ſtrong.

Guaiaci ſcobs is an ingredient in the tinctura jalappæ compoſita & decoctum lignorum, elixir ſalutis; gummi in tinctura cantharidum; reſina in pilulæ Æthiopicæ, pilulæ ecphracticæ, chalybeatæ, and pil. ecphract. purgantes.

NEPHRITICUM.

SECT. I.

Lignum nephriticum, *offic.* Lignum peregrinum, aquam cæruleam reddens, *B. P.* 416. Lignum ad renum affectiones, & urinæ incommoda, *Monard. Cluſ. Exot.* 324. Lignum nephriticum, *Park.* 1664. *R. H.* 1804. Lignum nephriticum, cæruleo & flavo tingens, *J. B.* 1492. Nephritic wood, is a hard, ſolid, heavy, yellowiſh brown wood, of little taſte or ſmell, which by infuſion communicates to water a power of reflecting the blue, and tranſmitting the orange rays of light.

"The chief mark of its goodneſs is its giving a blue colour to water, "which has had the ſhavings of it infuſed for four or five hours." *Miller, Bot.* 267. In aqua limpida maceratum, intra dimidiam circiter horam, eam "mirabili

" mirabili opalis gemmæ colore cæruleo & flavo tingit." *Geoff.* ii. 237. But if a very little of it be ſcraped with a knife into water it will take the double tincture in a minute, or ſo. Aſh-bark has the ſame quality, though not to ſo high a degree, as I noticed above.

It is brought from New Spain. According to Mr. *Dale*, p. 337, it is the wood of the tree which carries the balanus myrepſica, or ben-nut; that is of the moringa lentiſci folio, fructu magno anguloſo, in quo ſemina ervi, *J. B.* i. ii. 435. *R. H.* ii. 1745. *Pluk. Almag.* 253. Mouringou, (Monringon, *Dale*) *H. Mal.* vi. 19. l. ix. See the other ſynonyma in *Dale*; and a full account of the nux ben, and of its uſe, particularly of its oil in perfumes in *Geoff.* ii. 401. ad 409. It is not uſed in Britain.—It is ſaid to grow in Arabia and Egypt. But the lignum nephriticum comes from America, as I ſaid; and is the wood of the coatlii (ſeu aqueus ſerpens) quam alii Tlapalez-patli, ſeu medicina ſanguinis coccinea, *Herman.* 119. *R. H.* 1804. Is Mr. *Dale* right? " Hujus " ligni uſus, jam diu receptus fuit in his regionibus. Nobis mittit Nova " Hiſpania." *Monard.*

SECT. II.

The infuſion is diluent, reſolvent, and a ſafe diuretic; is ſaid to be lithontriptic, and to purge. It is therefore recommended in the ſtrangury, gravel, ſtone, obſtructions of the viſcera, dropſy, &c. though but little uſed.

" Calfacit & ſiccat gr. 1°. uſus ejus receptus eſt ad renum vitia, urinæque " difficultates, & incommoda. Hinc—in epatis & lienis obſtructionibus. Præ- " parationes ſunt infuſio; quæ in aqua fontana facta, nonnullis potus eſt ſat " expetitus, tum ratione ſaporis, quem fere nullum exhibet, tum quoque " coloris cærulei, adeoque amicabilis. Poteſt illa dilui vinum. N. adultera- " tur alio ligno ſimili, quod aquam croceo colore inficit." *Monard. Schroder.* 634. " Eſt aperitivum & diureticum, educens calculum, arenulas, & mu- " cum: infunditur ad ʒij. in aquæ communis ℔iß. & doſis eſt ad ʒij." *Nucl. Belg.* p. 174. " Urinam leniendo movet. Scribit Hernandez, hujus tinctu- " ram veſicam extergere, refrigerare, urinæ acrimoniam temperare, nec non " etiam febres extinguere, & colicis mederi. Addit Monardes in jecoris & " lienis obſtructionibus utilem eſſe.—Aquæ ſapor ligni maceratione nullatenus " immutatur. Quidam hujus tincturæ cyathum unum ſeu ʒvij. ſingulo mane " hauriunt. Alii aſſidue utuntur, eaque etiam vinum diluunt.—Plurimi ejus " mirabiles effectus in dolore nephritico calculo, arenulis & urinæ difficultate " prædicant. Nonnullos tamen vidi, quos curationis ſpes fruſtrata eſt. De " vi lithontriptica, quæ illi tribuitur, valde dubito." *Geoff.* tom. ii. p. 238. Vide *R. H.*—Obſerve,

1. It is almoſt inſipid, yet pretty agreeable to the taſte, ſcarcely bitteriſh. " Saporis eſt moderate acris, & ſubamari, odore caret." *Nucl. Belg.* " Sapo- " ris ſubacris, nonnihil amaricantis." *Geoff.* " Mirum vero quod ſaporem " aquæ non mutat." *R. H.* " Saporis ſubacris, amari, aromatici, vim inci- " dentem in lingua relinquens." *Herm. Cynoſ.* p. 232. Vide *Boyle on Colours*, p. 3. exp. 10, &c.—2. If an acid be dropt into the infuſion, it deſtroys the blue colour; but by adding an alcali, it is again reſtored. How long the water will retain this quality I know not; but I kept it more than ſix years, without

without obſerving any change. " Poſt quindecim dies exoleſcit virtus," ſays *Hernandez.* It had however this effect on water after I had kept it eight years. Hence ſome (vide *Herman. Cynoſ.* 233.) infer it is alcaline, or contains a mild alcaline ſalt. It is ſafe, and perhaps no better a diuretic than ſweet water. But 3. *Herman. Cynoſ.* p 232. ut & *Albinus in MSS.* & *Chomel*, ſay, infuſed in wine, it is purgative, though in water only diuretic. I doubt of this, though I cannot deny it. *Geoffroy* ſays nothing of its cathartic virtue.

It may be given in infuſion or decoction to ʒj. or ʒij. " ℞ Raſur. ligni " nephrit. ʒj. affunde aq. graminis ℔ß. F. infuſum ad nephritidem." *Herm. M. S.* " ℞ Ligni nephrit. ʒiv. Vini Rhenani ʒxvj. F. infuſum, ſaccharo " edulcorandum. Sic habetis gratam potionem." *Albin. M. S.* Vide *Boyle on Colours*, part 3. exp. 10.

LECTURE LI.

SANTALUM.

SECT. I.

1. SANTALUM album, *offic.* Santalum album, *B. P.* 392. *Garciæ*, *Cluſt. Exot.* 173. *J. B.* i. 486. *Ger.* 1586. *Park.* 1605. *R. H.* 1804. *Dale*, 325. *Geoff.* ii. 240. White ſaunders, is a hard, ſolid, heavy, pale, or yellowiſh-white wood, of little taſte or ſmell.

2. Santalum citrinum, ſantalum flavum, *offic.* Santalum pallidum, *B. P.* 393. *Ger.* 1586. *Garciæ*, *Cluſ. Exot.* 173. Santalum citrinum, *Park.* 1605. *J. B.* i. 486. *R. H.* 1804. Yellow ſaunders ought to be of a yellow ſomewhat citrine colour, of an aromatic penetrating bitteriſh taſte, and fragrant ſmell. As we have it, it is rather browniſh than citrine, and even leſs yellow than the white.

" Santalum citrinum eſt lignum ſolidum ponderoſum, pectinibus rectis, " quo fit ut haud difficulter in rectas aſſulas findatur, colore ex pallido ruf- " feſcente, aut verius flaveſcente, ac nonnihil in citrinum vergente; ſapore " aromatico, amaricante, cum acrimonia totum os implente ſuavi; odore " fragranti, moſchum nonnihil æmulante, aut ſane ex eo ad roſarum odorem " nonnihil vergente. Santalum album parum colore differt a citrino: magis " palleſcit, pyri ligno quod pallidum ſit colore ſatis ſimile: alioqui eadem " ſubſtantia, eadem textura, & pectines iidem. Sed odore inferius, quippe " qui debilis vix percipiatur, uti nec ſapor." *J. B.* " Sandalum album re- " vera nullam habet in colore, qua a citrino dignoſcatur, differentiam: inve- " nitur enim, quod magis flavo, & profundiore ſit colore, quam jam dictum " citrinum. Quapropter eſt a prædicto diſcernendum, odore tantum & ſa- " pore." *E. Cordo. J. B.*

They grow in the Eaſt Indies; eſpecially and plentifully in the iſland Timor. Some think them the wood of the ſame tree; the white being the ſap and the yellow the heart. Others that it is white, while young, and citrine when old. Others that they are ſpecies of the ſame genus, or rather varieties differing

differing only in taſte and ſmell. And *Garcias* ſays there is ſuch an affinity between them, that the natives only can diſtinguiſh them: that among innumerable logs of ſaunders, not one of fifty is yellow; and that it is dearer in the Indies than in Europe: he doubts therefore, whether any true yellow ſaunders is brought to Portugal. And the beſt that I have ſeen does not well agree to the deſcription of the true. "Flavi ſantali ſelectiſſimi librale fragmentum, "mihi liberale munere dedit noſter Hugo Morganus, Londinenſis pharmaco-"pola peritiſſimus an. 1581. Eſt vero id grave, ſolidum, nodoſum, colore "intus flavum, odore ſuavi cerebrum reficiens, & grato ſapore palatum le-"niens." *Cluſ.* (*Exot.* 263.) who is of *Garcias*'s opinion.

Bontius deſcribes a very odd kind of delirious fever, with which thoſe who go to the iſlands Solor and Timor to cut ſaunders are ſeized: "Oritur, ſays he, "ex diverſis cauſis, quarum præcipuæ hæ ſunt: odor recenter cæſarum arbo-"rum ſantali, quæ, ſatentibus ipſis incolis, neſcio quid viroſum e cortice "maxime, & cerebro inimicum exſpirant. Ad hæc, aeris conſtitutio eſt hic "nebuloſa & admodum gravis; nam habitacula incolarum ſunt in ſummis "montibus.—Addita fructus hic naſcentes edendi libertate.—Mutatione ſubita "aeris, &c." Vide *B. Medicina Ind.* c. 15. fol. 31. b. Mr. *Geoffroy* tranſcribes the ſymptoms, but mentions only the firſt aſſigned cauſe, which, perhaps, is the probable, or real one.

3. Santalum rubrum, *offic.* Santalum rubrum, *B. P.* 393. *J. B.* i. 489. *Garz. Cluſ. Exot.* 173. *Ger.* 1586. *Park.* 1605 *R. H.* 1805. Red ſaunders, is a very hard, heavy, ſolid, red wood, which ſcarcely colours the ſpittle, and has neither taſte nor ſmell.

It grows in Tanaſerim, and ſome maritime places of Coromandel. *Garzia.* "Illo interdum, ſays he, incolæ ſua idola, eorumque delubra fabricant." And that is neither ſweet to the taſte, nor when chewed tinctures the ſaliva red, whereby it is diſtinguiſhed from the Braſil wood. *Cluſius* and *Ray* ſay it colours the ſaliva; but what I tried did not. "Lapideæ fere duritiei & "ponderis ſunt, e ſantali rubri truncis fruſta, quæ delibrata importantur, co-"lore intenſius rubente quam Breſilium lignum, ut fere nigreſcant, pedinibus "rectis, denſiſſimis, interdum criſpis tuber, aut nodoſitatum veſtigia imitan-"tibus. Odorem nullum evidentem ſpirant; ſapore fere fatuo, cum levi ad-"ſtrictione. Commanſum vix modicum ſalivam rubeo colore tingit: at lin-"teo affrictum tingit. Cordo. Saporem habet dulciſcentem adſtringentemque "leviter, odorem nullum fatu dignum." *J. B.* l. c.

The name ſandalum is in *Pliny*, lib. xviii. c. vii. p. 450: but it is farris genus, a ſort of grain. *Garzias* derives it from, or thinks it a corruption of, chaudama, for ſo the wood is called in Timor and Malacca. See *Cluſ. Exot.* 247. "Sandali nomen eſſe ab Arabibus, puto; quid ſignificat neſcio." *Hoffman.* 309.

SECT. II.

The true yellow ſaunders is probably diaphoretic and diuretic: it is called cordial, and commended in catarrhs, obſtructions of the viſcera, lipothymies, &c. The white is worth little; the red uſeleſs, but for its colour. We might indeed very well want all the three.

" Refrigerant grad. 3. (aliis 2.) ſiccant 2. aperiunt. Epatica ſunt & car-
" diaca. Uſus præcipuus eſt in lipothymia, palpitatione cordis, obſtructione
" epatis, &c. Extrinſecus in catarrhis, cephalalgia, vomitu, epatis intem-
" perie calida, in epithem, &c.) N. ſantalum rubrum magis refrigerat &
" aſtringit, quam reliqua. Præparationes ſunt, 1. Extractum gummoſum
" cum ſp. vini. 2. Species diatrionſantalon. 3. Unguentum Santalinum.
" 4. Cerotum, ſeu emplaſtrum. 5. Trochiſci de ſantalis." *Schroder.* p. 673.

The Arabians thought them cold: if their and our ſaunders are the ſame, others, with as good or better reaſon, make them heating. The beſt of them I think inferior to the worſt lignum Rhodium.—I diſcover no aſtringency in the red ſaunders; nor does it blacken a ſolution of vitriol. I know nothing elſe it is good for than to give a red colour to the balſ. Locatelli, and ſpiritus lavendulæ compoſitus; for which purpoſe it is retained (and is the only ſantalum) in the *London M. M.* " Nec reſinam habet nec odorem dat." *Albin. M. S.* In infuſion, or decoction in water, it may be ſaid to cool more than the other two, adding nothing that is heating to the menſtruum. " Eo mo-
" neo pharmacopœos ex fide, videant (quod firmiter tenent omnes) an ſan-
" dali noſtri, quicunque illi ſint, frigidi ſint? Me retinent Monard. & Fal-
" lopius. Ille inquit, calefaciunt, & ſi guſtes, & ſi foris applices. Hic, ex
" odoris ſuavitate, ex acredine cum aliquo amarore, & cum decoquo, colligo,
" non eſſe frigidos in tertio gradu. Interim, quod mireris, frigidos aſſerit
" eſſe in primo, aut certe in ſecundo, ne cogeretur deſerere Arabas. Quanto
" ſapientius *Guilland*, qui calidos eſſe in ſecundo ait," &c. Vid. *Hoffman.* 309. § 54.

" Tres ſantali ſpecies ſale eſſentiali acido, oleo ſpiſſo & aqua graviore,
" exigua ſalis volatilis portione, & multa terra donantur. In citrino tenuius
" eſt oleum & uberius, minus tenue in albo, craſſius vero in rubro, in quo
" uberior terra, ut ex eorum odore & ſapore ſatis conſtat." *Geoff.* ii. 242.
" Citrinum potentius incidit, album longe debilius, utroque rubrum poten-
" tius aſtringit. His tribus medici fere omnes virtutem corroborandi, he-
" patis obſtructiones reſolvendi, viſcerum tonum reſtituendi, vel augendi tri-
" buunt.—Doſis citrini in ſubſtantia a ℈j. ad ʒj. rubri ad ʒij. in decocto
" ad ʒß." *Id.* ii. 243.

SECT. III.

They may be given to ʒß. or ʒj. in infuſion or decoction. I think common ſaw-duſt as good as any of them in ſubſtance. The yellow is an ingredient in the confectio alkermes, in place of lign-aloe; in trochiſci cypheos, & hedychroi, for the aſpalathus; and the red in the emplaſtrum defenſivum, & ſp. lavendulæ compoſitus.

SASSAFRAS.

SECT. I.

Saſſafras, lignum ſaſſafras, *offic.* Arbor ex Florida ficulneo folio. *B. P.* 431. Saſſafras. *Monardi. Cluſ. Exot.* 320. *Ger.* 1525. *Park.* 1606. *R. H.* 1568.

Saſſafras,

Saſſafras ſive lignum pavanum. *J. B.* i. 483. S. Anhuiba Braſilienſibus. *Piſo.* 98. Cornus mas odorata; folio trifido, margine plano; ſaſſafras dicta. *Pluk. Phyt.* 222. *Alm.* 120. Laurus, foliis integris, & trilobis. *H. Cliff.* 154. Saſſafras is a light, ſoft, browniſh-white wood, of a ſubacrid, ſweetiſh, aromatic taſte, and very fragrant ſmell; it is covered with a pretty thick bark, greyiſh on the outſide, iron-coloured within, of the ſame taſte and ſmell with the wood.

It grows in great plenty in Florida, Virginia, and many other parts of America. The root is preferred commonly to the trunk. Chooſe it recent, covered with the bark, (which ſome think the beſt part of it) and well-ſcented. Some have called it xylomarathron, lignum fæniculacium; "ſapore "acri, ſubdulci, aromatico; odore fragrante; ad fæniculi odorem accedente." *Geoff.* ii. 244. Yet it ſmells of tarragon, *Cluſ.* and ſomewhat of aniſe, *J. B.* "It is called cinnamon-wood, on account of its ſmell, which made the Spa-"niards, when they conquered Florida in 1538 under Ferdinand de Soto, "hope to find that valuable ſpicery there, which grows only in Ceylon." *Savary Dict.* ii. 1487. The French, who firſt brought it to Europe, called it ſaſſafras. An quaſi ſaxifraga. Vid. *Hoffman.* 308. "Ligni quoddam genus ex "Florida, nunc recens in Hiſpaniam invehitur, cujus, ante paucos annos, "notitiam Gallus quidam mihi dedit, ejus facultates mirum in modum præ-"dicans adverſus varios morbos, ut Galli experti erant, ab incolis edocti.— "Dicitur Indis pavame, Gallis, neſcio quam ob cauſam, ſaſſafras. *Monard.* l. c. (whoſe *Hiſtoriæ*, pars 1 & 2. came out in Spaniſh in 1569. and pars 3. in 1574.) It ſold at firſt for 50 livres per pound, (*Savary.* l. c.) but before 1688 at Marſeilles it was at but 4 or 5 ſols per pound. *Sav. Dict.* iii. 563.

SECT. II.

It is mildly-ſtimulating, attenuating, diaphoretic, diuretic, carminative, aromatic, antacrid, mucilaginous, antiſcorbutic, and vulnerary; and is recommended in the French pox, ſcrophulæ, ſcurvy, rheums, green-ſickneſs, barrenneſs, aſthmas, &c.

"Officinis inveniuntur: lignum & cortex, qui præfertur ligno, maxime "ſi, ex radice ſit, quippe radix reliquis partibus prævalet, adeoque & ejus "cortex. Vires. Cortex calfacit & ſiccat ad grad. 3. Lignum calfacit & "ſiccat in 2. attenuat, aperit, diſcutit, ſudores movet. Uſus præcipui in omni "morborum genere, præſertim obſtructionibus tollendis, partibus internis ro-"borandis, in ſterilitate emendenda, & venerea lue curanda. N. Inſtar pana-"ceæ in catarrhis habetur. Præparantur, 1. Extractum. 2. Oleum ſtillati-"tium." *Schroder.* 674. è *Monardo.*

1. It is remarkably aromatic and fragrant, not very acrid, but ſweetiſh. Its eſſential oil is heavier than water; yet riſes eaſily in diſtillation; and therefore flies off in boiling, leaving only its more fixed ſaline ſulphureous and mucilaginous parts, which agree with china in virtues; as its more volatile parts do with aniſe, though more ſtimulating. 2. Though ſoft and porous it keeps much better than is commonly imagined. I have had it twenty years old, and yet greatly aromatic. If the bark is any wiſe preferable to the wood,

it is on account of its aroma. But I doubt of the roots being better than the trunk. The infuſion however differs from the decoction. 3. It, as are moſt new medicines, was immoderately commended at firſt. Vid. *Monardes*, *J. B.* &c. It is certainly of great uſe in obſtructions of the viſcera and glands, in ſcrophulous and other ſwellings, and ulcers. "Curavi magnum quendam "virum, fluxione ad dextrum genu laborantem, decocto hoc bene gravido, cum "aliis remediis cedere nollet." *Hoffman.* p. 309. It is commended alſo for the gout, dropſy, intermitting and malignant fevers, nephritic and flatulent colics, palſy, cachexy, &c.

"Analyſi chymica, ex ligni ſaſſafras ℔v. extractæ fuerunt olei eſſentialis "odoratiſſimi limpidi, flaveſcentis in aqua præcipitis ʒx; olei craſſioris, em-"pyreumatici & rufeſcentis ʒvii; ſpiritus acidi ℔ij circiter; ſpiritus urinoſi "ʒij ʒv; carbonis ℔ij ʒvii. ʒij, unde cinerum ʒvii. gr. lx. & inde ſales fixi "ſalſi gr. xlii. & jactura fuit ʒxiv. (So that there were terræ ʒvii. gr. xviii.)" *Geoff.* ii. 246. Here was very little ſalt, little earth, and a great loſs. The virtues he gives it are but an abridgment of thoſe he gives guaiacum, with which it is often joined, however much theſe woods differ.—"Saporis eſt "paululum acris, calidi odoris aromatici ſpecifici, fere inſtar fæniculi, præci-"pue ejus cortex. Eſt aperitivum, alexipharmacum, ſudoriferum, diureti-"cum, cephalicum, ſtomachicum, carminativum, bechicum, & cardicum: "valet ad luem veneream, catarrhos, rheumatiſmum, arthritidem, cachexiam, "chloroſim, febres, præcipue tertianam notham, &c. Ingreditur ordinarie "decocta lignorum; datur ad ʒij. Fit oleum ſtillatitium, ſpiritus, &c." *Nucl. Belg.* p. 175. "Saporis ſubacris, ſubdulcis, tenuis aromatici; odoris "fragrantis, & fæniculati. Dicitur ſaſſafras, quaſi ſaxifraga, ob virtutem li-"thontripticam." *Herm. Cynoſ.* 222. Saſſafras-tea taſtes and ſmells like the wood. Sal vitrioli does not make it either green or black, and precipitates very little. After it ſtood macerating a fortnight in water, the infuſion became very mucilaginous and ropy; in which reſpects it agrees with the decoctions of china and ſarſa.

SECT. III.

It has been given in powder to ʒj. but it does better in infuſion or decoction to ʒß. (ſome go ſo far as ʒij.) The eſſential oil to viii. or x. drops. The wood is uſed in the aqua benedicta compoſita, (as alſo the bark), and decoctum lignorum. Monardes macerates ſaſſafras ʒß. in aquæ ℔x. for twelve hours; then decocts it to a third, and gives of the decoction ʒx. for a doſe, ſo at moſt it is but the decoction ligni ʒj. The remainder he boils to the conſumption of about one ſixth part only in aquæ ℔x. pro potu communi. Others decoct ligni ʒiß. in aquæ ℔iij. ad ℔j. and give ℔ß. for a doſe, that is the decoction of ʒvi. Vid. *J. B.* "Doſis pulveris ʒj. raro præſcribitur; "ſed ſæpius infuſum vel decoctum ab ʒß. ad ʒij. Olei eſſentialis a gut. iii. "ad xx." *Geoff.* ii. 246. *Johannes Neander Bremanc* publiſhed a book called *Saſſafraſologia*, hoc eſt, *Tecmarſis, nobile ſaſſafras lignum dextre ac feliciter, in omnibus ferme humani corporis incommodis, in uſum ducendi. Bremæ* 1627. in 4to. *Lind.* 649.

TINC-

TINCTILE.

SECT. I.

Lignum Campechenſe. *Offic.* lignum tinctile Campechenſe. *Pharm. Lond.* 12. Lignum Campeſcanum. *Offic. Dale* 344. Lignum Campechianum ſpecies quædam Braſil. *De Laet. Ind. Occid.* 274. *Sloan. Cat. Jam.* 213. *Hiſt.* ii. 183. *Raii Dendr.* 172. "Lignum Campeſcanum, lignum Indicum. *Mont.* "*Exot.* 8. Ligno Braſiliano ſimile. *B. P.* 393. Ligno Braſiliano ſimile, cœ- "ruleo tingens. *J. B.* i. 492. Criſta pavonis coronillæ folio ſecunda; ſive "tinctoria Indica flore luteo racemoſo minore, ſiliqua latiſſima glabra, lig- "num rubrum ſappan dictum ferens. *Breyn. Prod.* ii. 37. *Fl. Mal.* 92. Ery- "throxylum, ſive lignum rubrum Indicum ſpinoſiſſimum coluteæ foliis, flo- "ribus luteis, ſiliquis maximis. *Par. Bat. Prod.* 333. Tſiam-Pangam. *H.* "*Mal.* vi. 3. b. 2. *Fl. Malab.* 266. Pataghi, Patanghi, Acacia Zeylanica "major tinctoria Panſapan. *H. Muſ. Zeyl.* 42. Lignum Sapan vulgo. In "India orientali, atque etiam occidentali oritur." *Dale* 344. Hæmatoxylum. *Lin. G. Pl.* 417. p. 184. Logwood is a pretty ſolid and heavy dark red wood, of a ſweetiſh ſubaſtringent taſte, and not diſagreeable ſmell.

It grows in America. Campeachy, a bay in the Gulf of Mexico, in particular is famous on account of the great quantity of logwood that is cut there. "Jamaicæ inſulæ indigenæ quotannis aderunt Americæ continentis "provinciam Campeche dictam, ubi magnam harum arborum copiam cæ- "dunt, lignumque inde Jamaicam adferunt, unde in Angliam, infectorum "gratiâ, invehitur." *Cat. Jam.* 213.

SECT. II.

It is a ſubaſtringent, and probably alſo antiſeptic and diuretic; and commended for diarrhœas and dyſenteries, taken in decoction and extract.

"Lignum ad tingendum utile, in medicina raro." *Dale* 345. "Campêche "wood is uſed in dying. It contains much oil and eſſential ſalt. It is "aſtringent and ſtomachic." *Lem. Dict.* 309. "This wood has been but "lately introduced as a medicine. A decoction and extract of it are in uſe in "our hoſpitals, and are ſaid to have proved very ſerviceable in diarrhœas." *Lewis. Pharm.* p. 15. Obſerve,

1. By its taſte and uſe in dying it ſeems to agree with rubia tinctorum, but does not turn the bones of animals red. Vid. *Rubia.* 2. An infuſion of it (coarſely cut) in boiling water, after it has ſtood macerating for a day or two, is of a deep red colour, and ſweet ſubaſtringent taſte. Sp. vitrioli makes it paler, and precipitates a ſediment. Ol. tartari does not alter the colour, yet precipitates a little. Mixed with a ſolution of vitriol it becomes opaque, of a browniſh black colour, and ſomewhat greeniſh. After macerating in the water more than ſix months, (viz. from November to July) it neither turned mouldy nor fœtid. The reſiduum dried was of a brown colour, and had loſt about

about one twelfth part of its weight: that is, of lig. 101 grains there remained 93. Ligni ʒj. infuſed in alcohol vini forty days, loſt ſome grains of its weight.

Its ſucceſs in fluxes does not depend on its aſtringency.

SECT. III.

It is given in decoction to ʒß: the extractum (prepared the ſame way as the extractum jalapæ) to ʒß.

" ℞ Ligni tinctilis Campech. in pulverem redacti ℔j. coque quater, vel " ſæpius in aquæ cong. 1. ad dimidium; deinde liquores ſimul mixti & co- " lati in juſtam craſſitudinem decoquantur." *Ph. Lond.* p. 31. " This wood " yields its tincture with ſo much difficulty, that it ſhould be reduced to a " very fine powder before boiling." *Pembert. Diſp.* p. 164. *An recte?* Vid. ſupra. It ſeems neither to need a ſpirit, nor triple coction in water.

VISCUS.

SECT. I.

Viſcus. Viſcus quernus, *offic.* Viſcum, *offic. Dale* 313. Viſcum baccis albis. *B. P.* 423. *T.* 610. *T. Hiſt.* 370. Viſcum. *Dod.* 826. *Ger.* 1350. *R. H.* 1583. *Syn.* 464. Viſcum vulgare. *Park.* 1392. Viſcus quercus & cæterarum arborum. *J. B.* i. ii. 89. Viſcum. *Lin. Gen. Pl.* No. 895. p. 473. *H. Cliff.* 441. Miſſel or miſſeltoe.

It is a paraſitical evergreen ſhrub, with a four-leaved calyx monopetalous corolla and four ſtamina on one part (or rather one plant); and on another, in a four-leaved calyx, an oval germ, ſomewhat tetragonal, which ripens into a round berry containing a ſingle flat heart-faſhioned ſeed, ſurrounded with a rough viſcid juice. The wood with its bark (both of trunk and branches), and leaves of a yellowiſh-green colour, and without taſte or ſmell, are reckoned medicinal.

It grows on a variety of trees and ſhrubs, flowering in the beginning of the ſpring. The berries, which are about the bigneſs of white currants, are ripe in October or November, but remain on the plant all the winter, unleſs the birds devour them; for " they are food for diverſe birds, as thruſhes, " blackbirds, and ringdoves." *Ger.* 1351.

Viſcus comes from the Greek ἶξος, for ſo it is called by *Ariſtotle de Gen. Animal.* l. 1. c. 1. p. 797. *Meteorolog.* l. 4. c. 8. p. 458. by *Dioſcorides*, l. 3. c. 103. p. 218. Yea, by *Hippocrates*, or the *Author Libri de internis affectionibus. Foes*, p. 549. lin. 41. *Galen. Simpl.* l. 6. p. 48. E, &c. But by *Theophraſtus*, ἰξία. *Hiſt.* l. 3. c. 9. p. 146. & c. 16. p. 234, &c. " Quod nomen " commune, at Stelin Euboenſium, Hyphear Arcadum vocabulum eſſe ſcri- " bit." *B. P.* " Viſci tria genera. Namque in Abiete & Larice (Pino *Theophr.*) " Stelin dicit Euboea naſci, Hyphear Arcadia. Viſcum autem in quercu, " robore ilice, pruno ſylveſtri, terebintho, nec aliis (aliis autem *Theophr.*) ar-

" boribus adnaſci, plerique." *Plin.* l. 16. c. 44. p. 406. Vid. *Theophr. de Cauſ.* l. 2. c. 23. p. 260. lin. 4. " Ilex (πρινος) fert præter glandem, gra-
" num quoddam puniceum : & viſcum atque Hyphear habet. Quapropter
" ut fructus quaternos habeat nonnunquam contingit ; binos proprios, bi-
" noſque alienos ; viſci ſcil. atque hyphearis. Fert a ſeptentrione viſcum, a
" meridie hyphear." *Theophr. Hiſt.* iii. c. 16. p. 234. " Viſcum (ἰξος) opti-
" mum quod recens eſt, colore intus porraceo, extra vero ſubflavo, quodque
" nil habet aſperi aut furfuracei. Conſit e fructu quodam rotundo, fruticis
" in robore (ἐν δρυι) naſcentis, foliis buxo ſimilibus. Contunditur fructus,
" deinde lavatur, tandemque in aqua decoquitur. Sunt qui acinos com-
" manducantes ipſum conficiant. Gignitur quoque in malo, pyro & pleriſque
" aliis arboribus : atque etiam apud fruticum quorundam radices invenitur."
Dioſcor. l. 3. c. 103. p. 217. Canit *Virgilius*, *Æneid.* l. 6. ver. 205.

" Quale ſolet ſylvis brumali frigore viſcum
" Fronde virere nova, quod non ſua ſeminat arbos,
" Et croceo fœtu teretis circumdare truncos.
" Talis erat ſpecies auri frondentis opacâ
" Ilice, ſic leni crepitabant bractea vento.
" Corripit extemplo Æneas.

" Quare recentiores obſervarunt in abiete, acere, betula, caſtanea, cerro,
" corylo, cotoneo, cynoſbato, ilice, larice, meſpilo, nuce, olea, oxyacantho,
" oxycedro, pomo, populo nigra, pruno ſylveſtri, pyro domeſtica & ſylveſtri,
" quercu, robore, roſis, ſalice, ſubere, ſorbo, terebintho, & tilia. Veteres
" arbitrati ſunt viſci acinis a turdo comeſtis, quod a pulpam pertinet, con-
" coqui ; quod ſeminis eſt, incoctum ab alvo dejeci, fiſtique in arboribus illis,
" in quibus iſti quieſcere conſueverunt. Sed quaſi cornua ex oſſibus anima-
" lium, ſic ex arboribus viſcum educi, cum Scaligero *Exerc.* 168, credimus."
B. P. 493. " Viſcum multis arboribus innaſcitur. Vidimus in acere minore,
" fraxino, corylo, tilia, ulmo, ſalice, ſorbo aucuparia, & rhamno cathartica.
" Malis & pyris, necnon oxyacanthæ frequenter ; aliis arboribus rarius in-
" naſcitur. Apud nos rariſſime invenitur in quercu. At quercus latifolia,
" teſte Cluſio, per multas Pannoniæ ſylvas, viſci feraciſſima eſt.—In provincia
" Gallicana, in buxis & amygdalis, viſcum alte progerminat & copioſe."
R. H. 1583.

It was the opinion of Ariſtotle, and all the antients, that the viſcum grew from its own ſeed, firſt ſwallowed by birds, (turdi, palumbes, &c.) and then dunged on the trees. This Scaliger, both the Baulimi, Saracen, &c. reckoned a fable ; becauſe they could not ſee how the ſeed could ſtick to perpendicular, much leſs to the under ſide of ſloping or inclining, branches, where yet it is often obſerved notwithſtanding the winds and rains to which it muſt be expoſed. But the viſcidity of their dung, and the influence of the rain in waſhing the ſeed off the upper ſide of the branch, on which it might fall, will account for this. " The miſſeltoe-thruſh doth often carry the ſeeds from
" tree to tree ; for the viſcous part of the berry ſometimes faſtens the ſeed
" to the outward part of the bird's beak ; which to get diſengaged of he
" ſtrikes his beak againſt the branches of a neighbouring tree, and thereby

" leaves

" leaves the ſeed ſticking by the viſcous matter to the bark; which, if it " lights upon a ſmooth part of the tree, will faſten itſelf thereto, and the " following winter will ſhoot out and grow: and in the ſame manner it may " be propagated by art." *Miller Dict.* art. *Viſcum.* It is true Mr. T. attempted this, faſtening them to ſuch branches of the apple-tree and hawthorn as they uſed to grow on, in March and April, but without ſucceſs, the wind and rain always carrying them off. Vid. *T. H. Pl.* p. 374. If others had always been as unſucceſsful, it would have looked as a confirmation of the opinion of the antients, that this ſeed would not vegetate unleſs it went firſt through the guts of birds. " Omnino autem ſatum, ullo modo naſcitur, nec " niſi per alvum avium redditum, maxime palumbis & turdi. Hæc eſt na- " tura, ut niſi maturatum in ventre avium, non proveniat. Altitudo ejus " non excedit cubitalem, ſemper fruticoſi ac viridis. Mas fertilis, fœmina " ſterilis." *Plin.* l. 16. c. 44. p. 409. And hence the proverb Κιχλα χεζει αὐτη κακον. Turdus ipſe ſibi malum cacat. *Eraſm. Adag.* 484. " Turdus " cacat in ſui excidium." *Colb.*

Although Bradley, Colbatch, &c. ſpeak of the propagation of miſſeltoe by art as a very eaſy thing; yet Mr. Barrel's experiments ſhow that it is not ſo, and that a variety of accidents may defeat the attempt. See *Rich. Bradley's New Improvements of Gardening, &c.* London 1717. in 8vo. *Sir John Colbatch's Diſſertation concerning Miſſeltoe, &c.* London 1719. in 8vo. in 2 parts, of 30 and 40 pages. The ſixth edition (as it is called) is without the year, and in two parts conſiſting of 72 pages: it has been tranſlated into French.

" The antients made the miſſeltoe a ſuper-plant peculiar to the oak, " and tell us, that although it ſeemingly produced ſeed, they did not be- " lieve that that ſeed could poſſibly be made to vegetate; becauſe, I ſup- " poſe, they had tried it in the earth without ſucceſs. But as it is ſo fre- " quently growing on other trees beſides the oak in our times, I ſhall take " occaſion at once to overturn their opinion in relation to this plant, by " ſhewing how it may be propagated from ſeed upon any tree whatever. " About Chriſtmas, when the berries are ripe, they may eaſily be made to " ſtick upon the ſmooth bark of any tree.—The viſcous juice will bind it " faſt to the part; and with this ſmall trouble you may expect young plants " the following year, provided you ſecure them from the birds by a net. I " have ſeen twenty plants of miſſeltoe growing upon as many different ſorts " of trees and ſhrubs in one garden, which were propagated in the ſame " manner I have mentioned." *Bradley Gard.* i. p. 25. which has been ſeveral times reprinted.

" The miſſeltoe-thruſh during the winter is nouriſhed from the pulp of " the berries, but the ſeeds are diſcharged with the excrement undigeſted. " Now the excrement, being of a ſlimy nature, ſticks faſt to the branches of " the tree upon which it falls; and if there be any crack in the bark, there " the ſeed lodges itſelf, and produces a plant the next year. It has been " often propagated by cutting a ſlit into the bark of a tree, and ſticking in " a ſeed. I have been told of one that has adorned his trees with it, to " make them delightful in the winter ſeaſon.—It is ſupported principally " from the air." *Colbatch*, i. p. 7.

The

The moſt particular and beſt account of this artificial propagation of the viſcus, that I have ſeen, is in a letter to Sir Hans Sloane by Mr. Edmond Barrel, Rector of Sutton in Kent, publiſhed in the *Phil. Tranſ.* No. 397. for *Jan. Feb.* and *March* 1727. p. 215. Here the author ſays that, "The miſſeltoe-ſeed is flattiſh, and ſhaped ſometimes like a heart, ſometimes oblong (thus O). The oblong put out but one germen; thoſe like a heart have two, which prove two diſtinct plants. That he endeavoured to ſow the ſeeds, by way of inoculation, which Sir J. Colbatch recommends, in the oak, aſh, beech, pear and apple-trees, in Feb. 1719, but he could not make them ſtick in the cuts; though he had from one (which was of the heart-like ſhape) ſtuck in the bark without any cutting a pair of plants.—About the 28th of March 1719, this, with two more on the apple-tree, and one on the pear-tree, began to ſhoot thus: The viſcus matter having ſtuck the ſeed on, and, as it dried, drawn the ſeed cloſe and flat down to the bark, there began to ſpring out of one end of the ſeed a ſmall deep-green ſhoot, very like a ſhort piece of a little claſper of the vine. At firſt it aroſe upward from the bark, and then turning again, as it approached the tree, it ſwelled out ſomewhat bigger round about the end; yet leaving the very tip or bottom quite flat, forming as it were a foot to ſtand upon, not unlike the bottom of ſome braſs peſtles. This foot, when it came to the bark, about May or June 1719, fixed itſelf thereon: and being thus faſtened at both ends it made a little arch, whoſe diameter was as long as the ſeed, or about a tenth of an inch. In this condition it remained all that year, till about March or April 1720; and then that part which was joined to the bark, where the ſeed firſt ſhot forth, let go its hold, and, raiſing itſelf upward, put forth leaves, and became the head of the plant; the other end of it, which had taken footing in another place, becoming the root. He ſays, that he has ſowed theſe ſeeds on near thirty ſorts of trees and ſhrubs, and yet never had above ten plants that held out the ſecond year. His moſt thriving pair of plants of 1719, being about three inches in length, were, 21 May 1722, ſtruck off by the falling of a rake-handle againſt them. They took with them only the outmoſt ſkin of the tree, and he could not ſee any ſigns of deeper rooting: but on the 12th of March 1723, three or four little buds ſhot forth, and another by the 18th; which all had leaves that ſummer; and in Feb. 1727 made a cluſter of boughs of four or five joints high, and bore berries in the winter: whereas two others on the ſame tree, of the ſame age, and ſix or ſeven joints high, had borne none." In another letter to Sir Hans, dated 20 Aug. 1728. *Phil. Tranſ.* No. 405. p. 547. he has ſome obſervations on the difference of ſex in miſſeltoe, and makes ſome plants carry only male or barren flowers, and others (hermaphrodite, or fertile, which he calls) female flowers; and not the flower on one part, and fruit on another part of the ſame plant, as *T. B. J.* and *Lin. G. Pl.* editionis 1737. makes it. But *Linnæus G. Pl.* ed. 1742. agrees with him, making one plant mas, and another (not hermaphrodite however, but) female. Vid. *Eames's Abrid.* vol. vi. part 2. p. 348—352.

Although nothing is to be ſeen on the part of the tree where the viſcum grows but a little tumor, yet by cutting into it, or diſſecting it, it will appear that its roots not only penetrate the bark, but alſo run pretty deep into

the wood, its fibres, (which are of a greeniſh colour, and eaſily traced,) being interwoven with and piercing the veſſels and veſicles whence it derives its nouriſhment. Vid. *T. H. Pl.* p. 373. Thus what the earth is to other plants, or rather what the ſtock is to the graft, or bud united to it, that the tree is to the viſcus which grows on it. There ſeems therefore little reaſon to prefer the miſſeltoe of one tree or ſhrub to that of another. The viſcus quercinus is commonly moſt eſteemed. But what can it get from the oak? Attriction! It is nothing leſs than aſtringent. Others prefer the viſcus corylinus: but it matters not which is taken: they are all equally uſeful or uſeleſs.

" Aiunt Druides ſolitos fuiſſe, per adoleſcentes ſuos, viſcum ſuum anni " principio, mittere, quo viſo clamarent omnes annum eſſe novum: atque " hinc manaſſe quod juvenes hodieque, anni principio oſtiatim diſcurrentes, " ſtipemque carmine poſcentes, appellant id Aguilaneuf, quaſi a Gui l'an neuf, " *i. e.* ad viſcum annus novus. *Voſſ. Etymolog.*" *R. H.* p. 1584. See Mr. *Du Hamel's Obſervations on the Guy. Mem. Acad.* Ann. 1740. p. 677—714.

SECT. II.

It is antacrid probably; is called a ſpecific for the epilepſy, and all convulſive diſorders; and commended alſo for vertigoes, apoplexies, pleuriſies, quartans, worms, and I don't know what.

" Viſcum quercus (quod præ reliquis viſci generibus probatur) calfacit " moderate, ſeu paulatim emollit, diſcutit. Uſus præcipuus (ac ſpecific.) eſt " in epilepſia. Extrinſecus maturat tubercula, parotides, cæteroſque abſceſſus, " cum reſina ac cera mixtum. Præparatio eſt, Gluten. *i. e.* extractum viſco- " ſum e viſco, (*birdlime*) quod ingreditur nonnulla emplaſtra." *Schrod.* 659.

" Præfertur quernum. In uſu ſunt lignum, folia, gluten baccarum & cor- " ticis. Ligni uſus præcip. Specifice in epilepſia, apoplexia, & vertigine. " Arcanum quoque eſt contra pleuritidem. *R. H.* Folia jumentis præbentur " ad ſecundinas retentas ejiciendas: cum ligno etiam viribus conveniunt. " Gluten vim habet emolliendi & diſcutiendi." *Buxb. Dale* 313. " Ratione " terrearum particularum acido abſorbentium, & nimium ſanguinis motum " ſiſtentium, convenit in hæmorrhoidum alvi & menſium fluxu, ut et inflam- " mationibus internis. Forſan ob eandem rationem commendatur in epilepſia " & convulſionibus." *Herman. Cynoſ.* p. 237.

But, 1. It has neither taſte nor ſmell when dried (as we have it) that I can diſcover: the berries " are viſcous and ſweetiſh." *T. Hiſt.* 372. " Folia " ſaporis ſubdulcis & ſubacris; baccæ lento & tenaci liquore plenæ, odore " quodam grato vinoſo, ſapore jucundo." *J. B.* " Lignum eſt ſaporis ſub- " aſtringentis. Baccæ introſumptæ glutinoſitate ſua, ventriculo & inteſtinis " obſtinatius adhærent, & cum ſint acerrimæ, facile excitant hypercatharſes, " & viſcerum inflammationes, unde inter venena merito collocantur." *Nucl. Belg.* p. 307. They are rather antacrid: and ſmall birds eat them not only without harm, but are nouriſhed by them; though that which is moſt viſcid in them, being ſeparated from their principles, and united becomes ſo viſcid, as to be probably indigeſtible; for birdlime is diſſolvable neither in water nor in ſpirits: hence viſcum is numbered among the " venena or toxica quæ

" conſtringendo, incraſſando, obſtruendo, exſiccando, cita vel lenta morte " perimunt." *Boerh. Inſtitut.* §. 1143. But *Matthiolus*, p. 590. ſays, " Novi " ego complures, morbi (comitialis) & medicamenti prorſus ignaros, qui " ligni loco, viſcum ipſum in catapotiis devorandum dederunt." Perhaps in pills it might paſs unaltered; but as thus it could do no good, ſo it ought not to be uſed internally, as all agree.

2. I poured boiling water on the tops and leaves of miſſeltoe, not very long dried; and when it had ſtood macerating three days, the infuſion was very tranſparent, no more tinctured than new brandy, and had very little taſte, ſomewhat like that of very weak, long-drawn, and almoſt taſteleſs green tea, not acrid in the leaſt, nor ſenſibly viſcid. It only diluted ſyrup of violets; but gave the tinctura heliotropii a pale Burgundy-red colour, which a little oleum tartari did not deſtroy, but only made it darker with a greeniſh caſt; which ſp. vitrioli took away, making the mixture of a florid-red colour. The ſolution of vitriol did not in the leaſt turn the infuſion either blackiſh or greeniſh, it being only diluted by it. Neither did it efferveſce or make any ebullition with alcalies or acids. The oleum tartari made its colour more yellow, but did not give it an urinous ſmell. Hence it is neither alcali, nor acid, nor aſtringent, nor very ſulphureous, nor abſorbent, nor aromatic; ſo not on any account to be numbered among the roborantia; though *Van Swieten* writes, " Hæc videtur eſſe ratio quare viſcus quercinus tantum nomen " obtinuerit in hoc morbo (epilepſia) curando, cum egregiam roborantem vir- " tutem habeat." *Comment. in Aph.* vol. iii. p. 449.—Sir *John Colbatch* ſays, Viſci cum toto ℥viij diſtilled by a retort in a ſand heat, yielded of acid ſpirit near ℥ij. " much about the ſame ſtrength, and not much differing in taſte " from common ſpirit of vinegar." What elſe it afforded he does not tell us, though he increaſed the heat till the ſand became red-hot; and adds, " From the niceſt obſervations I have been hitherto able to make, the princi- " pal life and energy of miſſeltoe conſiſts in its reſin, as does that of the Pe- " ruvian bark, and Virginian ſnake root." Vide *part* ii. p. 10 and 11. His teſtimony is but a weak proof and wants confirmation, as will preſently appear.

3. The antients ſay the leaves fatten cattle; and Mr. *Ray* that they are reckoned good ad eorum ſecundas remorantes ejiciendas. " Hyphear ad ſa- " ginanda pecora utilius cenſet *Plinius*. At *Theophraſtus*, & viſcum, & hy- " phear, & ſtelidem multum nutrire tradit. Nam & boves & jumenta hoc " pabulo, poſt meſſem ali atque pingueſcere. Vitia modo purgat primo, ad- " dit *Plinius*, dein pinquefacit, quæ ſuffecere (ſuperfluere *Dale*) purgationi." *J. B.* i. ii. 94. " Commanducatæ fruticis frondes & depaſtæ a jumentis & " vaccis, a ruſticis noſtris, ad ſecundas remorantes ejiciendas utiles cenſen- " tur." *R. H.* 1584. (Can we thence infer that it is nouriſhing?) " Even to " infants there can be no error in giving them too much, but the more they " take the better, it being of a nouriſhing quality, and no ways hot, or in the " leaſt tending to throw them into a fever; nay it is rather of itſelf a febri- " fuge." *Colbatch* i. p. 22. That it is hurtful to the tree it grows on, and ſometimes kills it, was obſerved by *Theophraſtus*, notante *R. H.* " The late " learned Mr. *Perault* informs us, that the miſſeltoe is a plant of a ſtrong taſte " and ſmell; that it is full of a poiſon, that weakens the tree that nouriſhes it;

" that ſo long as it remains on it, the fruit has always a diſagreeable taſte;
" and that the way to reſtore the tree to its former vigour, is to rid it of this
" domeſtic enemy, which returns it a dangerous venom, in place of the
" agreeable juice it draws." *Sav. Dict.* ii. p. 302.

4. As great virtues are attributed to it uſed only as an amulet, as when inwardly taken; and ſome of them not very credible.—Sir *John Colbatch* ſays that " Being one day upon a journey, I ſaw ſome hazel-trees plentifully ſtocked
" with miſſeltoe. It immediately entered into my mind that there muſt be
" ſomething extraordinary in that uncommon beautiful plant.—Having made
" the moſt ſtrict inquiry into the nature of miſſeltoe that I was capable of, I
" concluded *a priori* that it was a medicine very likely to ſubdue not only the
" epilepſy, but all other convulſive diſorders upon the foot of *Marcus Marci's*
" *Hypotheſis.*" part i. p. 283. One who could ſee what nobody elſe could might taſte vinegar where no vinegar was. But to come to experience.

In the formerly mentioned book, *De internis affectionibus*, attributed to *Hippocrates*, the leaves of the viſcum are ordered for the firſt diſeaſe of the ſpleen.
" Data etiam quæ ſplenem attenuare poſſunt ſingulis diebus; aſphodeli ſe-
" men, aut ἰξ υτα φυλλα, aut fænum græcum, aut viticis ſemen, aut rutam,
" aut menthæ radicem; ex his quodcunque volueris, tritum in vino auſtero,
" dato jejuno." *Hipp. Linden.* ii. p. 238. This is the more remarkable, in that it is the only inſtance that I can find among the antient Greeks, of the leaves or any part of the plant's being uſed internally. *Dioſcorides*, *Galen*, &c. all mention the ἰξος, and its uſe outwardly applied; but it is the glue, or bird-lime made of the fruit of the plant, they call ſo. " Viſcum diſcutit, emollit,
" attrahit, tubercula, parotidas, alioſque abſceſſus maturat reſinæ parique
" ceræ admixtum: epinyclidas quoque in ſplenio ſanat. Vetera autem ulcera,
" malignoſque abſceſſus, cum thure mollit; lienemque abſumit cum calce,
" aut gagate aliove lapide coctum & impoſitum. Ungues quoque extrahit,
" cum arſenico aut ſandaracha illitum. Cæterum cum calce vinique fæce
" miſtum ſuam vim intendit." *Dioſcor.* lib. iii. c. 103. p. 218. " Viſcum
" explurima aerea, & aquea calida, pauciſſima terrena ſubſtantia conſtat.
" Nam acrimonia in eo amaritudinem excellit. Valenter ex alto humores
" extrahit, nec eos tantum tenues, ſed & craſſiores, eoſque diffundit ac di-
" gerit." *Galen. Simpl.* lib. vi. p. 48. & *Act.* i. 1. p. 28. " Ἰξος calfacit cum
" acrimonia, trahit itaque fortiter ex profundo, & diſcutit ſimiliter ut thapſia,
" ſed longe inefficacior quam illa eſt." *Paulus*, lib. vii. p. 623.

The antient Druids indeed highly valued the plant, and looked on it as a panacea, *omnia ſanans.* " Nihil habent Druidæ viſco, & arbore in qua gig-
" nantur (ſi modo ſit robur) ſacratius. Jam per ſe roborum eligunt lucos:
" nec ulla ſacra ſine ea fronde conficiunt, ut inde appellati quoque interpreta-
" tione Græca poſſint Druidæ videri. Enimvero quicquid adnaſcatur illis e
" cœlo miſſum putant, ſignumque eſſe electæ ab ipſo Deo arboris. Eſt au-
" tem id rarum admodum inventu, & repertum magna religione petitur: &
" ante omnia ſexta luna, quæ principia menſium annorumque his facit, &
" ſeculi poſt triceſimum annum, quia jam virium abunde habeat, nec ſit ſui
" dimidia. Omnia ſanantem appellantes ſuo vocabulo, ſacrificiis epuliſque
" rite ſub arbore præparatis, duos admovent candidi coloris tauros, quorum
" cornua nunc primum vinciantur. Sacerdos candida veſte cultus arborem

" ſcandit. Falce aurea demetit. Candido id excipitur ſago. Tum deinde " victimas immolant, precantes ut ſuum donum Deus proſperum faciat his " quibus dederit. Fæcunditatem eo poto dari cuicunque animali ſterili arbi- " trantur, contraque venena omnia eſſe remedio. Tanta gentium in rebus " frivolis plerumque religio eſt." *Plinius*, lib. 16. c. 44. p. 409. Who elſewhere deſcribes the glue and its virtues much the ſame way as *Dioſcorides* does; but adds, " Quidam id religione efficacius fieri putant, prima luna col- " lectum e robore ſine ferro. Si terram non attigit comitialibus mederi. " Conceptum fæminarum adjuvare, ſi omnino ſecum habeant. Hulcera com- " manducato impoſitoque efficaciſſime ſanari." *Plin.* lib. 24. c. 4. p. 607. Is it of the glue or birdlime he ſpeaks here? Probably not; at leaſt he does not intend it ſhould be taken inwardly. For in many places viſcum is named among poiſons; and you have viſci ſumpti remedia; as *Lib.* 20. c. 4. p. 513. *lin.* 15. *Lib.* 24. c. 6. p. 610. *lin.* 27. *Lib.* 27. c. 7. p. 671. *lin.* 53. *Lib.* 28. c. 10. p. 702. *lin.* 19. & 39. *Lib.* 32. c. 3. p. 679. *lin.* 43, confounding the ixia *Dioſcoridis*, with the ixia *Theophraſti*. However we find, that the viſcum, plant or glue, was in Pliny's time, ſome way or other, reckoned by ſome a remedy for the epilepſy.

Whether any of the Arabians uſed the miſſeltoe inwardly I know not. But in *Gordon*'s *Lilium Medicinæ*, publiſhed circa 1305, the viſcus quercinus is ſometimes ordered for the epilepſy. " Multa enim ſunt quæ curant epilep- " ſiam, unum eſt viſcus quercinus, ſi portetur ad collum, aut quocunque " modo ſumatur." *Lil. Med.* fol. 119. b. He has it alſo in a ſyrupus ad materiam phlegmaticam digerendam, and in another ad materiam melancholicam digerendam: in the firſt however the viſcus quercinus makes not one ſixteenth of the materials; and in the other about a thirteenth part. In his prognoſtica he ſays, " Dico vobis de epilepſia quod ego habui in cura multos, " juvenes, ſenes, pauperes, divites, viros & mulieres, & fere de omni ſpecie " epilepſiæ, & tamen nec per me, nec per alium, vidi aliquem curatum, niſi " eſſet puer, aut proveniſſet a malo regimine, & quod non multum duraſſet; " tamen fui diligentiſſimus in omnibus, & patientes obedientes." *Ibid.* fol. 119. a. Yet when he comes to treat of the cure he begins thus, " Cum ali- " quis eſt in paroxyſmo, ſi aliquis ponat os ſupra aurem patientis, & dicat " ter iſtos tres verſus, procul dubio ſtatim ſurget:

" Gaſper fert myrrham, thus Melchior, Balthaſar aurum;
" Hæc tria qui ſecum portabit nomina regum,
" Solvitur a morbo Chriſti pietate caduco.

" Quod autem his dictis recte in foramine auris, verum eſt, probatum eſt " frequenter, quod ſtatim ſurgit. Et dicitur etiam ſi ſcribantur & portentur " ad collum quod perfecte curantur. Dicitur etiam quod ſi pater & mater, " vel patiens, vel amici jejunaverint tribus diebus, & poſtea vadant ad eccle- " ſiam, & audiant miſſam; & poſtea ſacerdos dicat ſupra caput evangelium.— " Ubi dicitur erat ſpumans & ſtridens, & hoc etiam genus Demonii non " ejicitur niſi cum jejunio & oratione, &c. (*Mark.* ix. ver. 20.) Et poſtea " quod ille ſacerdos, poſtquam devote & per intentionem legerit ſupra caput " evangelium, ſcribat, & quod portetur ad collum, curat perfecte procul du- " bio."

" bio." *Ibid.* fol. 119. a. Then he gives a variety of medicines, digerentia, purgantia, &c. and says, among other things, " Intelligendum quod longus " usus metridati curat omnem epilepsiam." *Ibid.* fol. 120. b. But on the whole it does not appear he laid great stress on the viscus quercinus in the cure of this disease, or that the fame of this remedy was so great in his day as it came to be afterwards. " *Gordonius* has left us a large volume called *Lilium* " *Medicinæ*, a book mightily celebrated in those times. But there is scarce " any thing remarkable in it, except the troches which now go by his name, " and the description of the pulvis ad guttetam, so famous then in those parts " of France, and which is in vogue even to this day." *Freind's Hist.* ii. p. 263. He is called in the Latin *Bernardus Gordonius*, but in the prefixed privilege to the printers (B.) Gordon. He was a Professor Medicinæ in the university of Montpelier. The book I have is printed at Paris in 1542, in 8vo. consisting of 490 leaves, *i. e.* 980 pages. His proemium concludes thus. " Inchoatus est liber iste, cum auxilio magni Dei in præclaro studio montis " pessulani, post annum 20. lecturæ nostræ, anno Domini 1305. mense Julii." The trochisci are described in his *particulæ sextæ* cap. 10. *De ulceribus renum*, fol. 304. b. and were retained in the *London Dispensatory* till the last edition. As for the pulvis ad guttetam, I cannot find it in him; neither among his remedies for the epilepsy does he mention ungulæ alcis, or cranium humanum.

" Non apud priscos tantum, sed etiamnum hodie apud Christianos super-
" stitiones locum habent circa viscum. Invenias enim qui credant viscum
" quercinum amuletum adversus veneficia & ludibria Satanæ efficax esse, ideo-
" que e collo puerorum & infantum suspendunt, quo a veneficiis tuti esse
" queant. Quidam empirici existimant viscum quod quercui, corylo, aut
" pyro adnascitur, si terram non tetigerit, in pulverem redactum, ac e vino
" potum comitialibus mederi. Itaque ex eo orbiculos conficiunt, quos ad
" eundem morbum facere credunt. Alii argento includunt, & inter alia, e
" collo puerorum & infantum suspendunt. Omnia visci genera, dum viridia
" adhuc & recentia sunt, tusa, succo extracto, auribusque indito discutiunt
" collectiones earum, & emolliunt eas intra paucos dies doloremque finiunt.
" (*E. Trago*, qui obiit 1554. æt. 56.) Sunt qui querni visci lignum in te-
" nuissimum pulverem redigunt, & comitialibus hauriendum præbeant, quo
" tantum medicamento, multos fuisse sanatos affirmant. (*E. Matthiolo*, qui
" obiit 1577. æt. 77.) Adnotandum tamen ligni visci usum in medendo præ-
" clarum a doctissimis quibusque haberi, & a plerisque medicis præscribi contra
" epilepsiam, apoplexiam, & paralysim, multumque in hisce casibus præstari,
" tum intus epotum, tum vero in collo appensum.—Viscum pyri sylvestris
" contractione membrorum laborantibus, maximo auxilio esse scimus, ait
" *Matthiolus*; contunditur id, una cum foliis, & ramis, & cum pinguedine
" capi recenti. Rami, novitii præsertim, commendantur in fluxu muliebri,
" & nephritide. Quidam viscum quercinum, qui terram non tetigerit, in aqua
" rutæ decoquunt, & 40 diebus potandum præbent, & sudare jubent efficaci
" & probato, ut aiunt, remedio adversus epilepsiam, cui experimento etiam,
" non parum tribuere videtur *Camerarius* (qui obiit 1598. æt. 64.) *Gentilis*, &
" *Jac. de partibus* (qui obiit circa an. 1465.) Lignum S. crucis vocant.—
" Scimus quosdam non inutiliter eo in vino macerato usos, contra vertiginem.
" Quidam nostro suasu, contusum aquis convenientibus macerant, ut de eo
" pocillent

" pocillent pueri contra vermes, egregio effectu.—*Cento, Medicus Wirtemb.* ad " epilepsiam commendat. *Nicol. Metri* mirabiliter commendat viscum coryli. " Eo visci ligno quod in Aronia nascitur arquatos prosperius curatos sibi com- " pertum tradit *Curtius*. Cæterum baccas, cujuscunque sint generis visci, non " intra corpus sumendas putat *Camerarius*, quod facile concesserimus, ob in- " signem lentorem. Idem tradit visci quercini usum esse, in quibusdam locis, " ad pleuritidem, epota pulveresati ʒj. ex aqua hordei, vel alia convenienti, " non sine solatio ægri." Hæc *J. B.* i. ii. p. 94.

" Pulvis visci, maxime quercini, non epilepsiæ tantum medetur, sed & " menses movet. Arcanum etiam est contra pleuritidem, semel atque iterum " & tertio in aqua cardui & papaveris exhibitus. *D. Bowle.* Visci oxyacantho " innascentis pulvis, vino albo, aut Hispanico infusus, & duabus ante pa- " roxysmum horis exhibitus, dosi subinde repetita, si opus fuerit, febrem " quartanam non raro fugat, & perfecte sanat."—" Est viscum corylinum in " epilepsiis, & aliis capitis affectibus, longe efficacius quercino: sed non nas- " citur in corylo, nisi post centesimum annum, ex opinione *Henrici ab Heers.* " Utrovis utaris perinde esse puto." *R. H.* 1584. The Honourable Mr. *Boyle* gives an instance of an inveterate epilepsy cured by means of the true misseltoe of the oak, given in powder as much as would lie on a sixpenny-piece, in black cherry-water, or beer, every morning for some days near the full moon. Vide *Usefulness of Experim. Phil.* p. 174.

Thus the moderns commend the viscum as a remedy for witchcraft, pos- session of the devil, the epilepsy, apoplexy, palsy, vertigo, otalgia, contractio membrorum, fluxus muliebris, obstructio mensium, gravel, worms, jaundice, pleurisy, quartan ague. While some prefer the quercinum in diseases of the head, and others the corylinum, others reckon both alike. Hence I infer the misseltoe has little effect in any disease, if it be not somewhat antacrid: and if any birdlime can be made of its bark, it will confirm this quality yet more. " E baccis & cortice ligni parari potest viscum ad aucupia." *R. Syn.* ed. 3. p. 464. (though this is made of the berries only in *R. H.* & *Syn.* editionis 2dæ.) However viscum is totally neglected now at London, and excluded the *New Pharmacopœia*; and with better reason, than many other simples. It is safe, and may be used for experiments sake. *N. B.* In the *Acta Physico-medica*, vol. i. (edit. 1727.) we have *Geor. Tobiæ Weismanni Usus Decocti Visciquerni polychrestus.* Where laudatur ad arthritidem, cachexiam, colicam, asthma, ap- petitum prostratum, & ad systema nervosum roborandum, cum 3. historiis, p. 422. In iisdem *Actis*, vol. viii. (edit. 1748.) *Jo. Balthasar Ehrhart*, De visci quercini operandi modo in morbis convulsivis, & congeneribus. *Obs.* 90. p. 334. (suppositio quolibet, &c.) And in *Comment. Lipsi.* (edit. 1756.) vol. v. we find among *Jo. Lud. Leberecht Loeseke Selectissima Remedia* the viscus, where- with he cured two miserable epileptics by giving pulveris ejus ʒiß. omni tri- horio, along with the decoction.

SECT. III.

It may be given in substance to ʒj. or ʒij, in infusion or decoction to ʒß. or more. It is an ingredient in the tinctura cephalica utraque, & pulvis de gut- teta or antiepilepticus.

Guttete,

Guttete, or as Charras writes it gouttette, is the epilepſy in the Languedoc dialect, *Lem. Pharm.* 203. ſo it ſhould be pulvis *ad* guttetam, not *de* gutteta. The oldeſt author I find it in is *Riverius*, whoſe *Praxis Medica* was firſt publiſhed Pariſiis 1640, in 8vo. "Pulvis epilepticus, de gutteta vulgo nominatus, in vulgaribus pharmacopœis deſcriptus non habetur; ſed in Monſpelienſibus officinis vulgo componitur, ex traditiva deſcriptione, quæ talis eſt. ℞ Rad. Pæoniæ, ſeminis ejuſdem, dictamni albi, viſci quercini, ana ℥ß, ſemin. atriplicis ʒij, cranii humani ℥iij. (for ʒiij.) coral. rubri præp. hyacinthorum præp. ana ʒjß. ungulæ alcis præp. ℥ß. moſchi ϑj. fol. auri ʒj. miſce, f. pulvis, cujus ϑß. ad ϑj. frequenter exhibeatur, cum lacte juſculo, & panatellis." *River. Prax.* lib. i. c. 8. In the treatiſe *De Epilepſia Puerorum* (*Lugduni* 1679. in folio, p. 179.) are eleven ingredients. In pulv. antiepileptico *D. D. D. Aquin*, there are eighteen. *Char. Ph.* 258. In *Lem. Pharmacop.* p. 203. there are more. In *Pharm. Lond.* fourteen or ſixteen. In the *Eding. Pharmacop.* ed. 1735, fourteen, and ſo on. All the forms are different from one another; though each retains viſcus quercinus, ung. alcis, & cranium humanum. "The author of this powder is not known; probably he was a *Languedoc* phyſician. It is much uſed, however, in Languedoc, Provence and Dauphine. It is differently deſcribed in ſeveral Diſpenſatories. I have followed the Pharmacopée de Lyon." *Lem. Pharm.* 203. The pulvis antiepilepticus, de gutteta dictus of the *Pharm. Eding.* ed. 1744, was thus made: ℞ Rad. dictamni albi, pæoniæ & valerianæ ſylveſtris; ac viſci querni āā p. æ. f. pulvis. That of the preſent *Pharmac.* (now called pulv. ad epilepticos) is ℞ Rad. valerian. ſylveſtris pæoniæ ana p. æ. *M. fiat pulvis.*

N. B. "The tinctura cephalica, ſays *Lewis*, is a compoſition extremely ſingular, with regard to the choice of its ingredients. The roots of caſumunar, and wild valerian, and the roſemary-flowers are indiſputably well choſen. Theſe coincide in one general intention, and ſeem to improve and heighten the taſte, ſmell and virtue of each other. But the peony-roots, white dittany, and miſſeltoe of the oak, are mere expletives. The peacock's dung is too filthy and ridiculous an article to deſerve any further notice." *Edingburgh Pharmacop.* p. 130. (ed. 1744.) tranſlated, &c. — It ſeems to be a prevailing opinion at London, that a compoſition cannot be *ſ. artem* unleſs it pleaſes both the taſte and ſmell of the patient: though it is very certain that the virtues of many medicines, eſpecially in nervous caſes, depend on the diſagreeable ſenſation they occaſion. If therefore the three indiſputably well-choſen ingredients make an agreeable medicine, the peacock's dung, (which otherwiſe I would willingly give up), ſeems neceſſary to prevent it: or elſe the roſemary and caſumunar ſhould be thrown out. But upon what theory or experiment he rejects the dictamnus albus and peony-roots, or makes them mere expletives, I cannot find; if it be not that they are ill taſted.

LECTURE

LECTURE LII.

Of HERBS and FLOWERS.

ABROTANUM.

SECT. I.

1°. ABROTANUM, abrotanum mas, *offic.* Abrotanum mas, anguſtifolium majus, *B. P.* 136. *T.* 459. Abrotanum vulgare, *J. B.* i. 192. A. mas, *Dod.* 21. *R. H.* 371. Abrotanum mas, *Ger.* 1105. A. mas vulgare, *Park.* 92. Abrotanum mas vulgare *Fuchſii*, *H. Ox.* iii. 11. Artemiſia foliis ramoſiſſimis ſetaccis, caule erecto, *H. Cliff.* 403. Common ſothernwood, or ſouthernwood. Belgicè Averoone, *Ger.*

It grows in Natolia, Syria, &c. yet endures our ſevereſt winters. In gardens it flowers in July, though ſeldom here. The leaves and tops, or young ſhoots are uſed. Herba, *Ph. Eding.* Folia, *Ph. Lond.*

2°. Abrotanum fœmina, chamæcypariſſus, cupreſſus, *offic.* Abrotanum fœmina foliis teretibus, *B. P.* 136. *H. Ox.* iii. 11. Santolina prima, *Dod.* 269. Santalina foliis teretibus, *T.* 460. Chamæcypariſſus, *J. B.* iii. 133. *Ger.* 1109. Abrotanum fœmina vulgare, *Cluſ. H.* 341. *Park.* 95. *R. H.* 359. Polium *Theophraſti*, *Dioſcorides*, & *Arabum* vermiculato folio. *Col.* i. 49. & p. 54. Santolina foliis quadrifariam dendatis pedunculis unifloris, *H. Cliff.* 397. Lavender-cotton.

It grows in Italy, &c. In the gardens it flowers in July. Froſt ſometimes kills it. The leaves and tops are uſed. "Officin. Nat. Herba ſeu Folia, ſed "raro." *Schrod.* 577.

It is abrotonum in *Pliny*, l. 21. c. 21. p. 562. Αβροτονον in *Theophr. Hiſt.* l. 1. c. 15. p. 44. Vide *Bod.* 684. *Dioſcorides* l. 3. c. 29. p. 184. *Galen. Simpl.* l. 6. p. 40. Not abrotanum, as it is in ſome moderns; and even in the lately reformed *London Diſpenſatory*. Ab ἄβροτον, inhumanum; vel ἄβρωτον, cibo inutile; vel ab ἁβρος & τονος, quia ἁβρως τεινεται, molliter extenditur. Vide *R. H.* "Αβροτονον quidem ſignificat molle delicatum robor: το ἀβροτανόν "autem nihil ſignificat." *Hoffman*, p. 80. "Dioſcoridis fœminam, chamæ-"cypariſſi nomine, *Plinius* (l. 24. c. 15. p. 621.) donaſſe videtur." *B. P.* But whether they are the abrotonum mas & fœmina Dioſcoridis, is uncertain. His deſcription of the fœmina, does not agree to the ſantolina; and all he ſays of the mas is "Alterum mas vocatur, ſarmentoſum (κληματαδες) gra-"cilibus ramulis (λεπτοκαρφον) velut abſinthium."

SECT. II.

Southernwood is a ſtimulating-aromatic bitter, or an antiſeptic-attenuating-diaphoretic and diuretic, called uterine and alexipharmic; and is commended

internally for the jaundice, vapours, worms, &c. and externally for inflammations, pains, tumors, &c. as diſcutient and anodyne. Some make it a remedy for baldneſs.—"*Dale* makes ſouthernwood a ſpecies of the mugwort: "—*Schroder* ſays it deterges and wonderfully diſcuſſes (valide diſcutit)— "that it diſcuſſes hyſterical (impetus) flatuſſes, and is good againſt the king's- "evil (morbum regium ſolvet.") *Quincy, Pharm.* p. 113.

Lavender-cotton is a detergent, deobſtruent, and diuretic, and is commended in obſtructions of urine, jaundice and worms. It agrees much more with artemiſia, than with abrotanum in virtues.

"Abrotanum (folia & gemmæ ſeu ſummitates, collectæ auguſto) calfacit, "ſiccat, incidit, aperit, ſubaſtringit, extergit, valide diſcutit, reſiſtit putre- "dini & veneno, morſibus venenatorum animalium medetur, vermes necat, "urinam movet, impetus hyſtericos diſcutit, regium morbum ſolvit. Ex- "trinſecus uſus ejus famoſus eſt in oſſibus exſiccandis, roborandiſque; & "quia pilorum ſignaturam ſummitates æmulantur, ad alopeciam tollendam "maximopere commendatur. *Præp.* 1. Aqua. 2. Vinum. 3. Conſerva. "4. Oleum infuſum. 5. Ol. ſtillatitium." *Schroder*, 522. *Dioſcorides* deſcribes the abrotoninum oleum, l. 1. c. 60. p. 33. & vinum abrotonites, l. 5. c. 62. p. 344.

1. It is of a diſagreeably bitter and aromatic taſte, and ſtrongly fragrant ſmell. "Odor vehemens, ſapor amarus & acris." *J. B.* It has a pleaſant grateful ſmell, but with a little ſourneſs. *Miller Bot.* p. 3. 2. A tea made with the tops is aromatic, bitter, and not very unpleaſant: it only dilutes ſyr. violarum; reddens a little the tinctura heliotropii; and turns a ſolution of vitriol to an opake greeniſh dirty-black. 3. It is commended outwardly for female obſtructions, &c. in baths and fomentations; and inwardly for the aſthma, (when mix'd with honey), flatulent and nephritic colics, &c. 4. "Analyſi "chymica ex foliorum & ſummitatum recentium ℔ v. prodierunt humo- "rum ℔ iv. ʒiv. ʒvij. gr. xvij. olei ʒxviij. carbonis ʒv. ʒij. unde cinerum ʒj. "ʒviiß. & inde ſalis fixi alcali ʒx. (ergo terræ ʒvß.) Et jactura fuit ʒiij. ʒiv. "gr. lv." Secundum *Geoff.* iii. p. 3. "Rarius abrotano intrinſecus utimur, "quod Etmullero mirandum & dolendum videtur.—Non adeo ſors noſtra lu- "genda eſt ob parcum abrotani uſum, dum frequentior eſt uſus abſinthii, "quod iiſdem viribus donatur & quidem valentioribus: quapropter a non- "nullis ut abſinthii ſuccedaneum tantummodo proponitur." *Ib.* p. 4.

N. B. The way I make tea of plants is this. I pour on the plant boiling water, and let it ſtand in a tea-pot for a day, (but commonly two or three days,) before I make any experiment with the infuſion: and thus I am to be underſtood when I mention tea of any part of a plant hereafter.

"Cupreſſus herba convenit qualitatibus cum abrotano. Uſuſque præcipuus "eſt in obſtructionibus epatis, renum, & ureterum. Curat icterum, lum- "bricos fugat. Extrinſecus ſubvenit morbis uteri, &c." *Schroder.* p. 577.

For, 1. It is of an aromatic ſomewhat-bitteriſh and not diſagreeable taſte, and pretty-ſtrong ſmell; neither ſo fragrant, nor ſo bitter by far as ſouthernwood. "Folia odoris medicamentoſi, cum quadam ſuavitate gravi; ſaporis "partim acris, partim amari." *R. H.* 2. Summitatum thea is ſomewhat aromatic,

matic, a little bitterish, with a bituminous or petroleum-flavour, pretty agreeable and smelling of the plant. It only dilutes syr. violarum: it gives a little redness to the tinct. heliotropii, which ol. tartari does not altogether destroy; and with a solutio vitrioli it becomes turbid, opake, and greenish. 3. It is said to kill worms. "Ventris lumbricos interimit, quotidiano experimento mu-" liercularum, tum semen, tum herba ipsa in lacte cocta & pota." *R. H.* 4. Analysi chymica fol. & summit. recentium ℔ v. præbuerunt humorum ℔ iv. ʒiij. gr. lxvi, salis vol. urinosi gr. xl, olei adiposi ʒivß, carbonis ʒviij. ʒvi. unde cinerum ʒij. ʒiij. gr. xii. & inde salis fixi alcali ʒi. gr. viii. (ergo terræ ʒi. ʒiij. gr. iv.) jactura fuit ʒij. ʒi. gr. xxxviii. secundum *Geoff.* iii. p. 7. "Santolinæ eædem quæ abrotono tribuuntur virtutes. Attamen paulo plus "salis volatilis, majorem olei quantitatem suppeditat: unde ad hystericos af-"fectus compescendos, hæc præstare videretur." *Ibid.* "*Costæus* quidam, "Aquisextiensis medicus, teste Garidello, santalinæ foliorum pulv. ʒi. felici "cum successu in pleuritide & peripneumonia exhibere solebat. Ejus folia in-"ter laneas vestes sparguntur, ad tineas ab illis arcendas." *Id. Ibid.*

Hence it appears that abrotonum mas & abrotonum fœmina differ in taste and smell, in their botanical characters and chymical analysis, and consequently in virtues; the one acting chiefly by its stimulus, the other by its saponaceous detergency. Yet the *London New Dispensatory* allows the use of the abrotonum either mas or fœmina, as the apothecary pleases, as if there were no difference betwixt them. *In limine impingere* in this manner argues no great attention to the Materia Medica in the compiler.

SECT. III.

Either kind of abrotonum may be given in substance to ʒj. in infusion to ʒij. The lavender cotton is an ingredient in the ung. & pulv. vermifug. and in the ung. nervin. I would prefer the southernwood as an anthelmintic.

"Abrotonum mas a veteribus ἑλμινθος βοτανη dicebatur; ab Hispanis "etiam hodieque herba lumbricorum. In his Galli usurpant etiam santolinæ "semen." *Hoffman*, p. 81. "A. maris oleum essentiale commendatur ad "paralytica membra; ac etiam cum ladano & adipi ursina ad pilorum genera-"tionem promovendam." *Geoff.* iii. p. 5.

ABSINTHIUM.

SECT. I.

1. Absinthium, absinthium vulgare, absinthium latifolium *offic.* absinthium ponticum, seu Romanum officinarum, seu Dioscoridis. *B. P.* 138. *T.* 457. A. vulgare majus. *J. B.* iii. 168. *H. Ox.* iii. 7. A. latifolium. *Dod.* 23. A. vulgare. *Lob.* 433. *Park.* 97. *R. H.* 366. *Syn.* 188. A. latifolium, sive ponticum. *Ger.* 1096. Artemisia foliis compositis multifidis, floribus subglobosis pendulis; receptaculo papposo. *H. Cliff.* 404. Broad-leaved or common wormwood.

It grows in waſte and rubbiſhy places, by highways, &c. in Scotland, as well as in England and more ſouthern countries; flowering in July, and plentifully propagating itſelf by its ſmall ſeed.

2. Abſinthium Romanum, abſinthium tenuifolium, *offic.* abſinthium ponticum tenuifolium incanum. *B. P.* 138. *T.* 457. A. ponticum vulgare, folio inferius albo. *J. B.* iii. 175. *H. Ox.* iii. 7. A. tenuifolium. *Dod.* 24. A. ponticum vulgare. *Cluſ. H.* 339. A. tenuifolium ponticum Galeni. *Ger.* 1096. A. ponticum ſive Romanum vulgare. *Park.* 98. *R. H.* 367. Artemiſia foliis compoſitis multifidis, floribus ſubrotundis nutantibus, receptaculo nudo. *H. Cliff.* 404. Roman wormwood.

This is not a Britiſh herb, but grows plentifully in Auſtria, Hungary, Thrace, &c. It flowers in July and Auguſt, and increaſes much by its creeping roots.

3. Abſinthium ſeriphium, abſinthium maritimum, *offic.* abſinthium maritimum, abſinthium Romanum noſtratibus falſo dictum. *Ph. Lond.* p. 3. Abſinthium ſeriphium Belgicum. *B. P.* 139. *T.* 458. *J. B.* iii. 178. *H. Ox.* iii. 9. A. ſeriphium, ſive marinum Anglicum. *Park.* 102. A. marinum album. *Ger.* 1099. *R. H.* 370. *Syn.* 188. Sea wormwood.

It grows plentifully in maritime places, and ſalt marſhes, in Britain, Holland, &c. flowering in July, and ſpreads much by the root. "Mulierculæ "botanopolæ Londinenſes abſinthium Romanum vocant." *Dale*, p. 99. "This is the Roman wormwood that is uſed in the ſhops, and has been ſo "for theſe 100 years, if not much longer; Parkenſon complaining in his "time, that the phyſicians and apothecaries made uſe of it inſtead of the former, though it came far ſhort of it in virtue; and Dioſcorides and Galen affirmed, that ſeriphium was hurtful to the ſtomach." *Miller Bot.* p. 7. And of the former he ſays, "And indeed this is the Roman wormwood that the "apothecaries ought to make their conſerve of; whereas they altogether "make it of the ſea-wormwood, becauſe more pleaſant and palatable." *Ibid.* And the London college of phyſicians, or rather their committee, have thrown the true Roman wormwood out of their *M. M.* and ordered the conſerve to be made of the ſummitates abſinthii maritimi. If they had had as great regard to their predeceſſors as to the herb-women, they would have retained both, and allowed the uſe of either, ſince the Roman is certainly as good as the ſea-wormwood, (if not better) and eaſily propagated.

The leaves and tops of all the three are uſed, or may be uſed as medicinal. Abſinthium, Græce ἀψινθιον, ab α priv. & ψινθος delectatio, quaſi indelectabile, vel quaſi ἀπινθιον impotabile. Vid. *R. H.* There are in Dioſcorides three abſinthia. 1. "Abſinthium bathypicron herba eſt vulgo cognita. "Præſtantius in Ponto & Cappadocia in monte Tauro apellato naſcitur." 2. "Abſinthium marinum, quidam σεριφιον vocant, eſt herba prætenuibus "ſurculis, abrotoni parvi ſimilitudine, minutulis referta ſeminibus, ſubamara "(ὑποπικρος), ſtomacho inimica, graveolens, & cum quadam calfactione "aſtringens. Copioſiſſimum in Tauro gignitur, & in Taphoſiri Ægypti." 3. "Abſinthium σαντονιον, in Gallia (Γαλατια) alpibus finitima naſcitur; "abſinthio eſt ſimile, attamen non adeo ſeminis fœcundum, verum ſubama-"rum, & ejuſdem cum ſeriphio facultatis." Thus *Dioſcor.* l. 3. c. 26, 27, 28. p. 183, 184. According to him therefore the ponticum is the bittereſt, ſummopere

mopere amarum. " Abſinthium ponticum multo Italico amarius." *Plin.* l. 27. c. 7. p. 671. But the abſinthium ponticum Galeni is not ſo bitter as the other abſinthia, but a more aſtringent and more agreeably aromatic, they being vehementiſſime amara. " Porro, adds he, id eſt tum folio, tum flore " longa quam cætera abſinthia minore : odor quoque non modo non inſuavis, " verum etiam aromaticum quid præferens ; reliquis autem omnibus eſt fœ- " dus : quare hæc fugere conveniet, uti autem ſemper pontico." Thus *Galen Meth. Med.* l. xi. c. 16. claſ. 7. p. 72. Hence the abſinthium ponticum Dioſcoridis & Galeni are not the ſame ; and if we have them both, the A. ponticum Dioſcoridis is our A. vulgare, and the A. ponticum Galeni our A. Romanum. As for the abſinthium marinum, there is little controverſy concerning it, being nowhere in uſe but in England.

N. B. 4. Santonicum & ſemen ſanctum, *offic.* ſementrina. *Ger.* 961. *Emac.* 1100. Abſinthium ſantonicum Alexandrinum, ſive ſementina, & ſemen ſanctum. *Park.* 102. Lumbricorum ſemen vulgare & Matthioli. *J. B.* 111, 180. Wormſeed. Ex Alexandria adfertur. Vid. *Dale* 100.

SECT. II.

Wormwood is a ſtimulating, attenuating, antacid, antiſeptic and diaphoretic bitter. It is called ſtomachic and hepatic, and commended internally in want of appetite, indigeſtion, agues, jaundice, dropſy, worms, &c. and outwardly for contuſions, tumors, gangrenes, &c.

" Stomachicum imprimis eſt, hinc hepaticum, & ſplenicum calfacit 1° " (ad 2°) ſiccat 3° grad. aperit, attenuat, aſtringit, amarum eſt : hinc ver- " mes necat, bilemque educit, crapulam diſcutit, ſudorem ciet, febribus " (præcipue tertianis) convenit. N. Capiti, quia vapores craſſos exhibet, pi- " gritiem ac ſomnum inferre ſolet, minus tamen ſi prius per aquam calidam " trahatur, leviterque exprimatur. Extrinſecus arcet vigilias temporibus ac " plantis pedum impoſitum, confortat ventriculum, auditum acuit (ſuffitus " aure ſuſceptus), &c. Præp. 1. Aqua ſtillatitia. 2. Spiritus. 3. Succus " expreſſus & inſpiſſatus. 4. Vinum abſinthites. 5. Tinctura cum ſp. vini. " 6. Conſerva. 7. Syrupus compoſitus. 8. Trochiſci de abſinthio. 9. " Oleum infuſum. 10. Oleum ſtillatitium. 11. Sal fixum. 12. Sal volatile." *Schroder.* 522.

For, 1. It is of a laſting exceſſively bitter, and ſomewhat aromatic taſte, (not otherwiſe nauſeous,) and pretty ſtrongly aromatic ſmell. I cannot call it acrid or ſtyptic. " Folia — odore aromatico, guſtu item, ſed cum pluſcula " amaritudine, conjuncta adſtrictione aliqua. Radix abunde calfacit, aroma- " tica gratia, ſine omni amarore, os purfundens." *J. B.* iii. 168. " Odor " totius plantæ aromaticus vehementior, guſtus amarus." *R. H.* " Odoris " eſt fortiſſimi aromatici ; ſaporis acris, valde amari, mediocriter calidi." *Nucl. Belg.* p. 2. " Folia intenſe amara, odoris aromatici vehementis." *Geoff.* iii. 8. Foliorum thea taſtes and ſmells of the leaves ; dilutes ſyrup of violets ; reddens tinct. heliotropii, and turns a ſolutio vitrioli to a greeniſh ſooty-black colour, and opake till it precipitates. Hence it appears to be ſubaſtringent, as many aromatic bitters are. 2. There is ſuch a difference between the

the analyſis foliorum, & ſummitat. in *Geoffroy*, that we cannot draw any conſequence from them. Vide *infra* *. 3. It is much commended outwardly as diſcutient and antiſeptic for pains, tumors, gangrenes, and mortifications: and inwardly is of great uſe for many chronic diſeaſes, *i. e.* ſuch as proceed from a colluvies ſeroſa, phlegmatic viſcidity, inertia bilis, and laxity of the fibres; as ſome cachexies, chloroſes, hyſteric paſſions, ſcurvies, &c. Mr. *Geoffroy* not improperly calls it bilis ſuccedaneum. Hence it muſt be hurtful in hot, bilious, and inflammatory diſeaſes and conſtitutions. "Vim "habet calfaciendi, aſtringendi, ſays *Dioſcorides*, concoctiones adjuvandi, bi- "lioſaque detrahendi quæ ſtomacho & alvo inhæſerunt. Urinam etiam cit, "& crapulam in potu præſumptum arcet. Valet & adverſus inflationes, "itemque ad diſcutiendos ventris & ſtomachi dolores. Anothexias & Icteros "ſanat ejus infuſum aut decoctum." And after commending it for ſeveral poiſons, &c. he adds, "Exiſtamatur & expreſſi ſuccus eoſdem præſtare ef- "fectus. Attamen potionibus improbatur, quod ſtomacho ſit inimicus, do- "loremque capitis cieat." l. c. "Common wormwood has been in great "eſteem, not only as a ſtomachic and deſtroyer of worms, but as a great de- "tergent in the jaundice and dropſy. But its uſe in ſuch intentions is now "quite laid aſide.—For by its hot and drying qualities it has been obſerved "to hurt the ſight, by drying up, or diſſipating the animal juices too much, "whereby the optic nerves have ſometimes alſo wanted their due ſupplies." Thus *Quincy*, ph. 119.—But ſuch-like objections againſt it ſerve only to confirm its real virtues and efficacy.

* "Analyſi chymica ex foliorum abſinthii latifolii nondum floridi ℔v. pro- "dierunt phlegmatis limpidi, plantæ odore & ſapore imbuti, quod neque al- "cali neque acidi notas præbuit ℥x, ʒvi, gr. xlviii. cum oleo eſſentiali per- "miſto: deinde humoris limpidi odorati, qui debilis acidi & alcali valen- "tioris notas præbuit, ℔ij, ℥xii, gr. xl. tandem humoris mere alcali & ſale "volatilis impregnati, ℥i, ʒv, gr. xlviii. ſalis volat. urinoſi ʒv. Olei tum "tenuis, tum craſſi ℥i, ʒij. Meſſa nigra in retorta ſuperſtes pendebat ℥vi, ʒij, "quæ igne reverberii calcinata reliquit cinerum, ℥ijß.—ex quibus lixivio ſalis "fixi mere alcali ℥i. extracta fuit.——Ex ſummitatum floribus & ſeminibus "onuſtarum ℔v. prodierunt humoris ℥lxiii." (whereof about 60 primum ſub- acidæ, deinde intenſe acidæ, ac tandem & acidi & alcali urinoſi notas præbuere; the reſt being only alcaline,) "Salis volatilis gr. xxiv. olei ℥ij. ʒvi. "gr. xviii. carbonis ℥vii. ʒvii. gr. xii. unde cinerum ℥ij. ʒiij. gr. xxxvi. & "inde ſalis fixi ℥i. ʒiij. gr. xlii. (ergo terræ ʒvii. gr. lxvi.) & jactura fuit ℥v. ʒij. gr. xviii." Thus *Geoff.* iii. p. 11.

2. Roman wormwood is emollient, detergent, deobſtruent, and diuretic; agreeing more with lavender-cotton, or rather camomile, than with wormwood: ſo that it is not ſo heating or ſtimulating, but ſafer in obſtructions of the viſcera.

3. The ſea-wormwood differs little or nothing from the Roman. Both are very little aſtringent; but the ſea-wormwood is yet leaſt ſo.

"Abſinthium ponticum (tenuifolium incanum. *B. P.*) epaticum eſt præ "vulgari; calfacit principio grad. 1. ſiccat in princ. gr. 3. minus amarum "eſt, aſtringit, valide incidit, extergit, diſcutit, putredini reſiſtit, educit bilem "per urinam; proin convenit in omnibus hepatis, veſicæ, bilis, ventriculi

" affectibus; tormina ventris & uteri ſedat; minus commode autem in muci-
" laginoſis affectibus pulmonum, imprimis ob aſtrictionem adhibetur. Ex-
" trinſecus diſcutit tormina ventris, adeoque & quæ partum ſubſequuntur;
" infantum vomitum compeſcit, &c. Præparata ejus raro pro uſu extant."
Schroder, 523.

1. They are of a bitteriſh, herbaceous, and ſomewhat aromatic taſte, and pretty agreeable ſmell. Thea foliorum A. Romani is bitteriſh, a little aromatic, and has the flavour of chamomile: the ſolution of vitriol turns it blacker than it does the tea made of common wormwood, and cauſes a precipitation more ſlowly; but ſyr. violarum & tinct. heliotropii had the ſame appearances, when mixed with both infuſions. Thea fol. abſ. marini agrees in every thing with the former, only it does not make the ſolutio vitrioli quite ſo black. " Abſ. pontici vulgaris folio inferius albo radices ſunt ſapore aro-
" matico præditæ; folia odore ſuavi, ſapore ſubamaro, corymbi vehemen-
" tiorem ſpirant odorem, quam folio." *J. B.* " Abſinthium ſeriphium Bel-
" gicum, miſit nobis ſiccum, ex Angliæ Londino, M. D. & rei botanicæ ſtu-
" dioſiſſimus Scotus, Jacob. Gargillus.—Sapor minime ingratus, aromaticus
" quodammodo, majorem adſtrictionem quam amarorem reſipiens; ejuſmodi
" fere eſt abſinthii Romani vulgo dicti: odorem nullum ſpirat. Colit in horto
" Gerardus, chirurgus & botanicus, cui nunquam floret." (e *Cargillo.*)
" Odore eſt gravi, ſalſi vero ſaporis, grati & amari, ſuo natali loco collec-
" tum, tranſlatum vero in hortos, & terram ubi aqua dulcis, multum variat
" ſaporem & naturam." e *Dod. J. B.* iii. 178. Vix variat.—2. Neither of them loſes much by drying, more than the common wormwood: neither yield they much by ſimple diſtillation, though ſomething of the aromatic ſpirit riſes.—3. " Analyſi chymica abſinthii tenuifolii foliorum & ſummitatum non-
" dum floridarum ℔v. exhibuerunt phlegmatis odorati, ſapidi, obſcure ſub-
" acidi ℥xxvi. ʒiijß. humoris adhuc odorati & ſapidi manifeſte acidi & auſteri
" ℥xv. ʒi. gr. lxiii. humoris turbidi rufeſcentis ſale vol. urin. impregnati
" ʒxxiiiß. olei ℥ij. ʒj. gr. xv. ſalis volatilis gr. xix. carbonis ℥viii. ʒj. gr. xxx.
" unde cinerum ℥ijß. gr. xv. & inde ſalis fixi mere alcali ℥j. ʒv. gr. xvi.
" (ergo terræ ʒvii. gr. i.) Jactura fuit ℥xxiv. ʒj. gr. xvii." Thus *Geoff.* iii. p. 19. An incredible loſs! " Abſ. pont. tenuif. incanum—medium eſt in-
" ter abſinthium & abrotanum." *B. P.* " Abrotanum minus Trago: abro-
" tanum album ſive fœmina Cordo eſt." *Ibid.*

" Roman wormwood aſtringes, incides, diſcuſſes, prevents putrefaction,
" and carries of choler by urine.—*Etmuller* ſays there is not a chronic diſtem-
" per, in which it is not ſerviceable. A conſerve of it is now much in uſe
" for weakneſs of ſtomach, loſs of appetite, and bad digeſtion." *Quincy*, ph. 101. *N. B.* It is abſinthium vulgare which Etmuller ſo commends. Vide *Etmul.* i. p. 502—504.

The common wormwood, in tincture or extract, is commended in quotidian and tertian agues, by *Ludov. Pharm.* p. 278. " Sedavi ſtatim ſerpen-
" tem gangrænam aqua marina, cui abſinthium incoxeram. *Tho. Bartholi-*
" *nus.* Accedit quidam oculorum lachrymatio adeo fervida, ut lachrymæ
" per faciem decurrentes eandem fere totam adurerent: hic ſucco abſinthii,
" cum albumine ovorum mixto & applicato ſanatus eſt. *Reuſerus.*" *R. H.* Many obſervations there are of the effects of wormwood judiciouſly uſed; but I have met with one only of the Roman wormwood, and that is of the dropſy

cured

cured by its conſerve. " Quoſdam novi hydropicas quaſi deploratos, qui ex " longo uſu comarum abſinthii pontici, quæ ſaccharo adſervatæ fuerant, ſani- " tati reſtitui ſunt. (It was a conſerve made ex A. p. p. 1. & ſacchari p. 3.) " Ex abſinthio ita parato, affecto prius purgato, datur quotidie ʒß. tribus " horis ante cibum." *Matthiol.* p. 510. " Abſinthio tenuifolio eædem tribu- " untur virtutes, quæ in latifolio dignoſcuntur. Minus tamen amarum eſt, " & magis aromaticum; unde palato quidem magis gratum, ſed tamen idcirco " minus efficax cenſemus." *Geoff.* iii. p. 20. *N. B.* Common wormwood is often in ſummer infeſted with a ſmall inſect: yet *Redi* obſerves, that worms died in a ſtrong decoction of wormwood in 20, 24, or 30 hours time: to which laſt time only they alſo lived, when the decoction was made into a ſoft mud with earth. Vid. *Redi Obſ.* p. 159.

SECT. III.

They may be given in ſubſtance to ʒj. or, if not too bulky, to ʒij: in infuſion to ʒß: the juice to ʒj; the extract to ʒß; aqua abſinthii compoſita, to ʒj; oleum eſſentiale ad gut. vij; conſerva ad ʒij; ſal fixum to gr. x.—The common wormwood is an ingredient in aqua abſ. comp. (ed. 1744, it is A. Romanum) tinctura ad ſtomachicos, and unguentum vermifugum.

" Pulvis exhiberi poteſt a ℈j. ad ʒj. Flores conditi a ʒj. ad ʒß. Succus " expreſſus ab ʒß. ad ʒij. Oleum eſſentiale a gut. ii. ad x. Extractum a ℈j. " ad ʒj. Sal fix. a ℈j. ad ʒß." *Geoff.* l. c.—De abſinthio vulgari tractans, " Jo. Veſlingius narrabat plures hydropicos a ſe extracto abſinthii percuratos. " è *Velſchio.* Salis abſinthii ℈j. ʒß. aut amplius, in ſucci limonum cochl. 1. " exhibitum, ad vomitum compeſcendum, in febribus biliofis, inque ipſa " iliaca paſſione, &c. vix unquam fruſtratum medicum." *R. H.* 366, 367.

ACETOSA. *Vide* Roots.

ADIANTUM.

SECT. I.

1. Adiantum, adiantum verum, capillus Veneris *offic.* adiantum foliis coriandri. *B. P.* 355. *T.* 543. *H. Ox.* iii. 587. Adiantum. *Dod.* 469. Adiantum, ſive capillus Veneris. *J. B.* iii. 751. Adiantum verum, ſive capillus Veneris verus. *Park.* 1049. Adiantum verum ſeu nigrum. *R. H.* 147. Capillus Veneris verus. *Ger.* 1143. *R. Syn.* 123. The true maidenhair.

It grows in Glamorganſhire, South France, Italy, &c. " It is brought to " us from the ſouthern parts of France, though it is ſaid to grow plentifully " in the county of Cornwal." *Miller. Bot.* 14. It is one of the quinque herbæ capillares, which we ſhall not ſeparate.

2. Adiantum album, ruta muraria, ſalvia vitæ. *offic.* Ruta muraria. *B. P.* 356. *T.* 540. *Dod.* 470. *J. B.* iii. 753. *R. Syn.* p. 122. Adiantum album. *Tab. Ic.* 796. *R. H.* 146. Ruta muraria, ſive ſalvia vitæ. *Ger.* 1144. *Park.*

1050. Filicula petræa, rutæ facie. *H. Ox.* iii. 585. Acroſtici ſpecies. *Lin. G. Pl.* 504. White maidenhair, tentwort, or wall-rue.

3. Adiantum nigrum, *offic.* adiantum foliis longioribus pulverulentis, pediculo nigro. *B. P.* 355. *H. Ox.* iii. 488. Adiantum nigrum officinarum. *J. B.* iii. 742. *R. H.* 152. *Syn.* 126. Dryopteris nigra. *Dod.* 466. Onopteris major. *Tab. Ic.* 79. Onopteris mas. *Ger.* 1137. Adiantum nigrum vulgare. *Park.* 1049. Filicula, quæ adiantum nigrum officinarum pinnulis obtuſioribus. *T.* 542. Common black maidenhair, or oak-fern.

This is made by ſome, as it may be by all, a ſuccedaneum for the adiantum verum. "Adianti proprium eſt, quod liquore perfuſum folium non "madeſcit, ſed ne humoris tantillum quidem ei adhæreſcere comperitur; "unde & nomen herba accepit. Genera ejus duo, candidum atque nigrum, "ambo ad defluvium capillorum utilia, oleo trita. Naſcuntur maxime locis "humidis." *Theophr. Hiſt.* l. 7. c. 13. p. 878. Hence Adianton, ab ἀ priv. & διαινομαι madeſco, rather than διαινω marceſco. It is the Ἀδιαντον, aliis πολυτριχον *Dioſcoridis*, l. 4. c. 136. p. 292. and is called Adiantum verum. Vid. *Plin.* l. 22. c. 21. p. 574. "Quidam (adiantum) callitrichon vocant, "alii polytrichon, utrumque ab effectu: tingit enim capillum.—Duo ejus ge"nera, candidius, & nigrum breviuſque. Id quod majus eſt, polytrichon, "aliud trichomanes vocant."—Thus *Pliny*.

4. Aſplenium, ceterach, ſcolopendrium, ſcolopendrium verum *offic.* ceterach officinarum. *B. P.* 534. Aſplenium, ſive ceterach. *J. B.* iii. 749. *T.* 544. *Ger.* 1140. *Park.* 1046. *R. H.* 139. *Syn.* 118. *H. Ox.* iii. 561. Aſplenium. *Dod.* 468. Aſplenium, fronde pinnatifida, laciniis alternis, adnatis. *H. Cliff.* 474. Spleen-wort, or miltwaiſt.

It ſhould be aſplenum, not aſplenium. "Ἀσπληνον, aliis σκολοπενδριον, "aliis σπληνιον, aliis ἡμιονιον, aliis πτερυξ, folia habet ſcolopendræ animali "ſimilia, plura ab una radice, in ambitum ſparſa. Naſcitur in petris, parie"tibuſque confectis e calculis ſilicibuſque, iiſque opacis. Nec vero caulem "nec florem, nec ſemen habet: folia autem filiculæ πολυποδιϊ modo inciſu"ris dividuntur, ſubter flaveſcentia, hirſutaque, ſuperne vero viridia." *Dioſ*"*cor.* l. 3. c. 151. p. 234. "Aſplenum ſunt qui hemionion vocant, foliis "triennalibus multis, radice limoſa, cavernoſa, ſicut filicis, candida, hirſuta, "nec caulem, nec florem, nec ſemen habet. Naſcitur in petris, parietibuſque "opacis, humidis, laudatiſſima in Creta." *Plin.* l. 27. c. 5. p. 669. "Hunc "locum *Plinius* omnino corrupit." *Dalecamp.* ceterach: an απτερυξ? Vide *Bod.* p. 1164. b.

5. Lingua cervina, phyllitis, ſcolopendrium vulgare, *offic.* lingua cervina officinarum. *B. P.* 353. *T.* 544. Phyllitis, ſive lingua cervina *vulgi. J. B.* iii. 756. Phyllitis. *Dod.* 467. *Ger.* 1138. *R. H.* 134. *Syn.* 116. Phyllitis vulgaris. *Cluſ. H.* ii. 213. *H. Ox.* iii. 556. P. ſive lingua cervina vulgaris. *Park.* 1047. Aſplenium frondibus enſiformibus, integris; baſi cordatis, inflexis, petiolis hirſutis. *H. Cliff.* 474. Common hart's-tongue, vulgo hic hind-tongue.

Phyllitis, "φυλλιτις, quaſi folioſum dicas, cum nihil niſi folioſum ceſpes "appareat." *B. P.* "Phyllitis, folia promit rumici ſimilia, ſed oblongiora "& magis virentia, ſena ſeptenave, recta: quæque parte anteriore lævia "cernuntur, poſteriore vero tenues quaſi vermiculos annexos oſtendunt.

" Naſcitur in umbroſis locis, ac viridariis; guſtu acerbo. Neque vero cau-
" lem, neque ſemen, neque florem profert." *Dioſcor.* l. 3. c. 121. p. 224.

6. Trichomanes, polytrichum, *offic.* trichomanes, ſive polytrichum *officin. B. P.* 356. *T.* 539. *H. Ox.* iii. 591. Trichomanes, ſive polytrichum. *J. B.* iii. 754. Trichomanes. *Dod.* 471. *Park.* 1051. *R. H.* 140. *Syn.* 119. Trichomanes mas. *Ger.* 1146. Aſplenium, fronde pinnata, foliolis ſubrotundis, crenatis. *H. Cliff.* 474. Engliſh black maidenhair.

" Trichomanes, quod & nonnulli adiantum apellant, locis iiſdem naſcitur,
" filici ſimile, at longe exilius: foliis tenuibus, ordine utrinque diſpoſitis,
" lenticulæ ſimilibus, adverſis inter ſe, in virgulis itidem tenuibus, ſplenden-
" tibus, nigricantibus iiſque acerbis." *Dioſcor.* l. 4. c. 137. p. 293. " Lati-
" nis etiam trichomanes dicitur; officinis polytrichum, quod nomen, ſecun-
" dum veteres, adianti eſt. Dicitur trichomanes a vi ſua, quod rara cute flu-
" entem capillum expleat, & ſubnaſci faciat: μανον enim illi rarum vocant,
" & τριχα, capillum: hinc Latinis capillaris dicitur." *B. P.* 355.

" Adiantum, aliis polytrichum, puſilla gerit folia, coriandri ſimilia, in ex-
" tremo inciſuris diviſa; virgulas vero e quibus ea prodeunt, nigro colore
" nitentes, prætenues & palmum altas: at neque thyrſum (καυλον) neque
" florem, neque ſemen (καρπον) profert: radix eſt ſupervacua." *Dioſcor.* l. 4. c. 136. p. 292.

All of them except the firſt are natives of Scotland, growing on old ſtone buildings, clefts of rocks, &c. and may be found, (except the aſplenium,) in the king's park at Holyrood-houſe. The leaves only are uſed.

SECT. II.

They are ſubaſtringent, antacrid, attenuating, and deobſtruent; and are therefore called pectoral, ſplenic, and nephritic; and commended in coughs, aſthmas, conſumptions, obſtructions of the viſcera, ſcurvy, and almoſt every diſeaſe.

" Adiantum caliditate & frigiditate temperatum eſt. Exſiccat, attenuat,
" aperit, extergit, pulmonum renumque vitiis medetur. Epatis & lienis
" obſtructiones reſerat, urinam & menſes ciet. *N. B.* Sunt qui trichomani
" eaſdem vires adſcribunt, adeoque ſubſtitui poſſe autumant; alii rutam
" murariam. Præp. 1. Aqu. 2. Syrupus ſimplex. 3. Syr. comp." *Schrod.* 526.

" Ruta muraria, cal. & frig. temperata eſt, ſiccat, digerit, diſcutit, tarta-
" ream & viſcoſam mucilaginem in pulmonibus &c. incidit. Uſus præci-
" puus eſt in tuſſi, aſthmate, pleureſi, ictero, obſtruct. ſplenis. Valet ad re-
" num & veſicæ dolores, urinam clementer ciet, calculoſque expellit. Ex-
" trinſecus capillos creſcere facit, ulcera manantia capitis abſtergit, ſtrumas
" & abſceſſus digerit." *Schrod.* 668.

" Scolopendrium verum calfacit & ſiccat; ſaporis acerbi abſtergit, ſplene-
" ticum eſt. Uſus præcipuus eſt in duritie lienis, ictero, febri quartana;
" urinam movet, calculum comminuit, menſes ciet, ſemen imminuere credi-
" tur (nocte effoſſum). *N. B. Dioſcorides* folia in aceto fervefacta, per dies 40
" pota, lienem abſumere ſcribit.—Præp. Syrupus de ſcolopend." *Schrod.* 677.

" Scolopendria vulgaris refrigerat ac ſiccat, ſubaſtringit, attenuat, ſplenica " itidem & epatica eſt. Uſus præcipuus eſt in liene tumido, fluxu alvi, " expuitione ſanguinis. Extrinſecus mundificat vulnera & ulcera.—*Præp.* " Aqua ex foliis." *Schrod.* 677.

" Trichomanes adianto (ut et rutæ murariæ) facultatibus omnibus reſpon- " det, ideoque eo recurrendum. Peculiariter tamen monet Tab. quod aqua " ſtillatitia imprimis proficua ſit iis, quibus jecur putreſcere incipit." *Schroder*, 694.

1. They are all of a ſweetiſh ſubaſtringent taſte, and earthy or agreeably muſty ſmell. " Ab adianti nigri radix deguſtata dulcedinem cum magna ad- " ſtrictione lingua percipit. Ruta muraria guſtu eſt nonnihil acerbo, & ſub- " aſtringente, cum tantillo dulcedinis leviuſculæ veſtigio. Aſplenii folia ſa- " porem adſtringentem, & aliquantulum tenuem habent. Phyllitidis ſapor " ſubacerbus, odor *Dodonæo* graveolens. Trichomanis ſapor mixtus, aſtrin- " gens, ſubdulcis, ſubamarus." *J. B. l. citatis.* All belong to the ſame tribe, and are frequently conjoined in preſcription.—2. Probably they yield much the ſame principles, if analyſed the ſame way. Yet the analyſis adianti nigri trichomanis, & linguæ cervinæ in *Geoff.* iii. p. 36, & 734. differ conſiderably in the quantity of the oil, fixed ſalt, and jactura.—3. They are extravagantly commended by both antient and modern authors. *Ex. gr.* According to *Dioſcorides*, " Adiantum aſthmaticis, dyſpnoicis, ictericis, ſplenicis, dyſuria la- " borantibus, decoctum auxiliatur. Calculum frangit, alvum ſiſtit, venena- " torum morſibus reſiſtit, menſes & lochia ciet, ſanguinis rejectionem inhibet; " alopecias denſat; ſtrumas diſſipat. Facitque & gallinaceos & coturnices " pugnaciores in cibum eorum additum." &c. *Meſue* makes it a purger of pituite and bile, and a purifier of the blood. *Matth.* 832. And an abſtract of its vires, as delivered by *Petrus Formius*, *M. D. Monſpelienſis*, in a book publiſhed by him on this plant, anno 1644, in French, takes up almoſt a page of *R. H.* viz. 147. " Adiantum Monſpelienſe a P. Formio . . . . tanquam pa- " nacea & medicamentum univerſale, ad omnium fere corporis partium ſa- " nitatem tuendam & morbos debellandos, vel ſolum ſufficiens commendatur. " Sed encomiaſtarum more in ejus laudes nimis effertur. Ejus virtutes longe " remiſſiores & debiliores eſſe, uſus & experientia demonſtraverunt." *Geoff.* iii. 38. who himſelf is prolix enough; and, according to his unfair method, copies this, and a great deal more from *R. H.* without naming his author.

" Analyſi chymica ex adianti nigri (*off. J. B.*) foliorum ℔v. prodierunt, " humoris ℔iv. ʒij. gr. xlv. Olei adipoſi ʒij. ʒiij. gr. lxvi. Carbonis ʒix. ʒiij. " gr. xviii. unde cinerum ʒij. ʒj. gr. x. & inde ſalis fixi alcali ʒvii. gr. xxxviii. " jactura fuit ʒiij. ʒvi. gr. xv. Ex polytrichi (ſive trichomanis) foliorum " ℔v. prodierunt humoris ℔iij. ʒxii. ʒii. gr. i. Olei ʒij. ʒviß. Carbonis ʒvi. " ʒvii. gr. lx. unde cinerum ʒix. gr. xxxvi. & inde ſalis fixi alcali ʒj gr. lvi. " jactura fuit ʒix. ʒvii. gr. xlvii. Ex linguæ cervinæ foliorum recentium " ℔v. prodierunt humoris ℔iv. ʒiv. ʒi. gr. xxiv. Olei ʒi. ʒvi. gr. xii. Car- " bonis fuere ʒvij. ʒv. gr. xxxvi. unde cinerum ʒj. ʒvi. gr. xlviii. & " inde ſalis fixi alcali ʒi. gr. iv. jactura fuit ʒij. ʒiij." Thus *Geoff.* iii. p. 36, & 734.

SECT. III.

They may be given in ſubſtance, in infuſion, decoction, and ſyrup *ad libitum*. Drachms, yea ounces, can have little effect; but a ptiſan made of any of them, and uſed *pro potu ordinario* for ſome time may do ſervice. The adiantum verum, or trichomanes, is an ingredient in the ſyrupus de althæa, & ſyr. pectoralis.

Of theſe capillary-herbs there is only one in the *London M. M.* viz. trichomanis, of which and liquorice-root the *Syr. pectoralis Ph. Londinenſis* is compoſed.

LECTURE LIII.

AGRIMONIA.

SECT. I.

AGRIMONIA, eupatorium, eupatorium Græcorum & Avicennæ, *offic.* Eupatorium veterum; ſive agrimonia, *B. P.* 321. Agrimonia *offic. T.* 301. Agrimonia, *Cæſ.* 319. *Ger.* 712. *R. H.* 400. *Syn.* 202. Agrimonia ſive eupatorium, *Dod.* 28. Agrimonia ſeu eupatorium, *J. B.* ii. 298. Agrimonia vulgaris, *Park.* 594. Eupatorium veterum; ſive agrimonia inodora, vel minus odora, *H. Ox.* ii. 614. Agrimonia foliis omnibus pinnatis, fructibus hiſpidis, *H. Cliff.* 179. Common agrimony.

It grows near hedges, on the borders of corn fields, and in paſture grounds; flowering in June and July. "Agrimonia, quod in agris abundat." *B. H.* Aliis ab ἀργεμωνη; "Sunt qui neſcientes ab anemone ſylveſtri, diſtinguere ar- "gemonen dictam & papaver rhæas, propter florem in puniceo colore con- "venientiam lupatorium errore ducti argemonen apellent." *Dioſcor.* l. 2. c. 207. p. 164. Vide *Bod. in Theophr.* p. 887. "Agrimonia ab ἀκις acumen, "becauſe the fruit of agrimony is garniſhed with prickles." *Lem. Dict.* 13. "Eupatoria regiam autoritatem habet." *Plin.* l. 2. c. 6. p. 635. "Sunt qui "velint nomen ab inventore Mithridate cognomento Eupatore habere.—Hoc "eupatorium eſt Græcorum & Avicennæ, & eupatoria Plinii: quibuſdam "ejuſdem Plinii agrimonia in arvis naſcens." *B. P.* In what ſenſe eupatorium can be ſaid to have folia quinquefolii aut cannabis by *Dioſcorides* l. 4. c. 41. p. 258. and by *Pliny* l. c. Vide *Bod.* p. 887. The leaves and tops are uſed.—Indeed I cannot find agrimonia in Pliny.

SECT. II.

It is ſaid to be antiſeptic, ſubaſtringent, antiſcorbutic and vulnerary; and internally is recommended in diſeaſes of the liver and ſpleen, the ſcurvy, cachexy, internal ulcers, rickets, fluxes, hæmorrhages, &c. and externally in baths and fomentations, for luxations, œdematous ſwellings, procidentia ani & uteri, &c.

"Epatica

" Epatica nobiliſſima imprimis eſt, hinc ſplenetica, vulnerariaque; calfacit " & ſiccat. 2. Subſtantia eſt tenuis, aperit, detergit, ſubaſtringit, corro- " borat epar, ejuſque fluxus coercet, adeoque uſu creberrimo venit in morbis " ab epatis imbecillitate ſubortis, ut ſunt hydrops, cachexia, &c. Extrinſe- " cus adhibetur ſæpiſſime in balneis & lotionibus. *Præparata* 1. Aqua ſtil- " latitia ex integra planta circa finem Junii collecta. — 2. Succus ex foliis & " floribus. — 3. Syrupus ex ſucco. — 4. Sal. com. ex cinere." *Schroder* 529.

1. It is of a ſubacrid, or ſaltiſh-ſubaſtringent taſte; and pretty agreeable aromatic, or, as it were, balſamic ſmell, though not very fragrant. " Folia " ſapore ſubacri, cum quadam adſtrictione, flores ſunt ſuaveolentes." *J. B.* " Agrimony is of a ſtyptic taſte, a little ſaltiſh mixed with ſomething of acri- " mony, and reddens a-little the blue paper." *T. Hiſt.* p. 47. " Saporis eſt " primo ſubauſteri, ſalini, dein amaricantis; odoris parum citrati." *Nucl. Belg.* 10. — 2. Foliorum thea is of a brandy-colour, herbaceous ſubaſtringent taſte, ſomewhat reſembling that of very weak bohea-tea. It only dilutes ſyr. violarum; reddens a-little tinct. heliotropii: vitriol turns it very black, and cauſes a ſlow precipitation. Oleum tartari makes it firſt yellow, then orange-coloured and turbid till a whitiſh ſediment falls to the bottom.—The eighth infuſion agrimoniæ odoratæ foliorum ſiccatorum gr. xlviij. in aquæ bullientis ℥iv. turn'd black by putting to it a-little ſal vitrioli, though each of the former infuſions had ſtood in maceration ſome days, and all the liquor had been pour'd-off every time. Hence it appears that the powder in ſome caſes may be much preferable to the infuſion. — 3. It is commended in mictu involuntario in powder by *Riverius:* for the mania in decoction by *Dolæus:* for mictus cruentus & gonorrhœas by *Weaelius:* and is numbered among the ſtimulantia aromatica, aperientia deterſiva ad ulcus pulmonum, nephritica, ſcorbutica leniora, & antirhachitica in *Boerh. Lib. de M. M.* " Utiliter quoque in " decoctis adverſus luem veneream paratis permiſcitur, teſte S. Pauli, qui re- " fert quendam in luis ven. curatione celebrem, eam pro ſecreto ſpecifico ha- " buiſſe." *Geoff.* iii. 48. Vide & *R. H.* I am informed that *Boerhaave* preſcribed to the late famous Lord *Lovat* the uſe of agrimony-tea. — " Aquam " deſtillatam aſſidue potam efficaciſſimum contra calculum Petrum Bembum " expertum fuiſſe referunt. Quin etiam *Petrus Foreſtus* de quodam ſcribit, " cui lapis in veſica erat, cum crebro herbam hanc cum ovis comediſſet, la- " pidem per fruſta cum lotio tandem expulſum fuiſſe. O! utinam tali li- " thontriptica virtute donetur." *Geoff.* iii. 50.

" Analyſi chymica agrimoniæ foliorum recentium ℔ v. præbuerunt humo- " ris ℔iij. ℥xj. ʒiv. gr. xii, olei ℥j. ʒvß, carbonis ℥v. ʒv. gr. xxvi, unde ci- " neris ℥j. ʒvi. gr. xx. & inde ſalis fixi alcali ʒviiß. (ergo terræ ʒvi. gr. xlvi.) " Jactura fuit ℥iij. gr. lx." According to *Geoffroy* iii. 47. But here the ſum total is only ℔iv. ℥v. ʒvij. gr. lx. ſo that there are wanting of ℔v. no leſs than ℥x. gr. x. " Ex hac analyſi, & ſapore quem folia referunt auſtero ſub- " ſalſo, cum acrimonia quadam, & ex quodam tenui rubore, quo eorum ſuc- " cus chartam cæruleam leviter tingit, concludere licet, hujus plantæ virtutes " referendas eſſe ad ſalem tartaro vitriolato, vel ſali coralliorum (made with " ſpir. of verdigris) ſimilem, " cum pauco ſale ammoniacali conjuncto," (this " is his own addition) utroque multo ſulphure craſſo involuto." *Geoff.* l. c. from *T. Hiſt.* p. 47. unnamed. " Sunt qui dicunt agrimoniam pulvinari ſub-

" jectam, dormientem tamdiu ſomno vinctum detinere, donec removeatur." *Boeclerus in Herm. Cynoſ.* p. 500. " Folia contuſa ad ani procidentiam utiliter " uſurpantur." *Geoff.* iii. p. 49.

SECT. III.

It may be given in powder to 3j, or much more; in infuſion, decoction, juice, or ſyrup, ad libitum.

" Agrimony is uſed in aperitive, cooling, and vulnerary ptiſans, decoctions, " broths, and potions." *T.* l. c.

ALCHIMILLA.

SECT. I.

Alchimilla, ſanicula major, *offic.* Achimilla vulgaris, *B. P.* 319. *T.* 508. *Cluſ. H.* ii. 108. Alchimilla, *Dod.* 14. *Ger.* 949. *R. H.* 208. *Syn.* 158. Achimilla major, vulgaris, *Park.* 538. Achimilla perennis viridis major, foliis ex luteo virentibus, *H. Ox.* ii. 195. Pes leonis, ſive alchimilla, *J. B.* ii. 407. (eſt 398. i.) Alchimilla, foliis palmatis, *H. Cliff.* 38. Ladies-mantle, bearsfoot, lion's paw, great ſanicle.

It grows in meadows, and hilly paſtures; flowering all the ſummer. " Pes " leonis, a forma foliorum; vulgo alchimilla, quod alchimiſtarum præconiis " celebrata ſit." *B. P.* " Stillaria *Matth.* Droſera & droſium, *Cord.* Stella " herba *Italis*, *Geſn.*" *Id.* " Sanicula in officinis duplex eſt, minor quæ & " diapenſia; & major, quæ peculiariter alchimilla, a chymiſtis tracta voce, " neſcio quo ſenſu. Utraque eſt novitia, & veteribus ignota." *Hoffman*, 440. The leaves are uſed.

SECT. II.

It is a ſubaſtringent, antiſcorbutic, and vulnerary; and commended in fluxes, hæmorrhages, wounds, ulcers, ruptures, &c. internè, & externè. It may be uſed, like agrimony, in any form.

" Vulneraria eſt e nobiliſſimis non poſtrema; caliditate & frigiditate tempe- " rata; conſolidat, adſtringit, extergit, ſanguinem incraſſat; proin utilis eſt " fluxui menſium, &c. Uſuque adhibetur interno in potionibus vulnerariis, " tum & externo. *Præp.* Aqua ex integra planta collecta Junio cum flori- " bus." *Schrod.* 529.

1. It is of a ſubaſtringent herbaceous taſte, and no ſmell. " Folia & radix " adſtrictione vehementi participant, atque ideo exſiccant." *J. B.* 398. k. vol. ii. l. 17. " Sapor foliorum eſt auſterus, radicis autem valde auſterus." *Nucl. Belg.* 12. — 2. Foliorum thea is of a beautifully-pellucid brandy-colour, and herbaceous taſte, and is not ſenſibly aſtringent, (though a ſolution of vitriol turns it to a bluiſh-black, and cauſes a ſlow precipitation.) It only dilutes ſyr. violarum; reddens a-little tinct. heliotropii, but not the blue paper.

paper.—Hence not ſtrongly aſtringent, though as ſuch, 3. It is commended in many caſes. " Reprimit & ubera virginum, laxiora aut nimium tumentia, " duriora efficiens." *Dod.* 145. For ulcers, wounds, &c. in fomentis, unguentis, emplaſtris. And internally alſo. " Decoctum ejus epotum interanea " vulnera, rupturaſque glutinat. Et quod dictu mirum eſt, tanta ejus plantæ " in glutinando vis eſt, ut ramices inteſtinorum, in pueris potiſſimum, ſanare " poſſit. *Fuch.*" *J. B.* In fluxu menſium nimio, fluore albo, hæmoptoe, mictu cruento, diabete, dyſenteria, &c. laudatur.

" Analyſi chymica alchimillæ foliorum recentium ℔ v. per B. V. diſtillatæ, " præbuerunt phlegmatis limpidi, herbaceo ſapore, primum obſcure acidi, " deinde manifeſte acidi ℔ij. ʒx. humoris manifeſte acidi & ſub finem ali- " quantiſper auſteri ℔j. ʒj. ʒiv. gr. xviii. Folia reſidua pendebant ʒxvij. " ʒviiß. quæ per retortam exhibuerunt humoris rufeſcentis tum intenſe acidi, " tum alcali urinoſi ʒiij. ʒij. gr. xviii. olei inſtar ſyrupi craſſi ʒxiv. gr. vi, " carbonis ʒviij. ʒvi, unde cinerum ʒiv. gr. xxxviii. & inde ſalis fixi ſalſi ʒiv. " gr. lix. Jactura fuit ʒvi. ʒv. gr. xxx." *Geoff.* iii. 52.

ALLIARIA.

SECT. I.

Alliaria, *offic.* Alliaria, *B. P.* 110. *J. B.* ii. 885. *Ger.* 794. *Park.* 112. *R. H.* 792. Heſperis allium redolens, *H. Ox.* ii. 252. *T.* 222. *R. Syn.* 293. Eryſimum foliis cordatis, *H. Cliff.* 338. Sauce-alone, or Jack-by-the-hedge.

It grows by hedges, bankſides, &c. is annual, and flowers in the ſpring; later if ſowed in gardens in the ſpring. The leaves are uſed, though ſeldom. " Alliaria eo quod folia digitis comminuta, allium, ſeu porrum ſectivum, cum " naſturtio redoleant: quibuſdam thlaſpidium ſecundum *Cratevæ*; aliis alecto- " rolophos *Plinii* l. 27. c. 5." (670.) *B. P.* 110.

SECT. II.

It is an acrid, antacid, diuretic plant; and commended internally for inveterate coughs, ſcurvies, vapours, &c. and externally, for foul ulcers, gangrenes, &c.

" Aperit, incidit, tenuium eſt partium. Interne urinam ciet, venenum " expellit, tuſſim veterem ſanat, dolores colicos ſedat. Externe putredini " reſiſtit, unde gangræna, ulceraque putrida, atque maligna ſanat." *Dale*, p. 201. " Vix ea hic utimur; alibi eam ſcordio ſubſtituunt." *Nucl. Belg.* p. 12.

1. It is of an acrid, bitter taſte, and ſmells of garlick. " Folia ſapore & " odore allii mitiore." *R. H. J. B.* " This plant is very bitter, ſtinks of " garlick, and reddens a-little the blue paper. By a chymical analyſis it gives, " beſides acid phlegm, volatile ſalt, fixed ſalt (tres lixiviel) much oil and " earth.—*Cæſalpinus* and *Hildanus* ſay that the powder of the leaves cures car- " cinomatous ulcers." *T. Hiſt.* p. 200.—2. It loſes much of its acrimony by drying;

drying; and is alcaleſcent or putreſcent. Foliorum thea is not much tinctured, and very tranſparent; of a ſubacrid herbaceous taſte, and ſcarcely bitter. Oleum tartari gave it a muddy whey-colour, but not a urinous ſmell. Solutio vitrioli made it a-little browniſh; but did not precipitate any thing. It turned the ſyr. violarum greeniſh; diluted infuſ. heliotropii, as pure water would have done, without changing its colour; and did not in the leaſt redden the blue paper. Yet — 3. It is much commended as an antiſeptic, for gangrenes and mortifications. *Fab. Hildanus* (Cent. 2. Obſ. 44.) writes "Succus, alliariæ in "gangrænis, ulceribus putridis & ſordidis magnarum eſt virium, ut a fre- "quenti experientia edoctus ſum." *R. H.* and *Boerhaave* is ſaid to have cured a gangrene from a compound fracture of a man's leg with this herb bruiſed with wine and applied to the part. See what is called his *Hiſtoria Plantarum*, p. 437. It is of uſe in gangrenes, as it promotes a ſuppuration and ſeparation; but it requires vinegar, or wine, or the like to make it an antiſeptic: and is more properly claſſed among antacida alcaleſcentia, & ſcorbutica acriora, with armoracia, &c. in *Boerh. Lib. de M. M.* Vide etiam *R. H.* "Uſus ejus "(ait) eſt ad embammata, ſive intinctus: ruſtici pro ſalſamentorum condi- "mento utuntur. Recens urinam ciere dicitur, ſicca veneno adverſari, ſi in "vino coquatur.—Scordium ut odore ita & viribus refert."

"Analyſi chimica, ex alliariæ foliorum recentium ℔v. prodierunt humo- "ris ℥ivß. 3j. gr. lxx. ſalis volatilis 3ß, olei ʒj. gr. lx. Carbonis fuere ʒiv. "3iij, unde cinerum ʒij. 3j. gr. vi. & inde ſalis fixi alcali 3vi. gr. l. (ergo "terræ ʒj. 3ij. gr. xxviii.) Jactura fuit ʒiv. 3iij. gr. xliv." *Geoff.* iii. 58.

The doſe is not determined: it may be uſed like ſcurvy-graſs, or water-creſſes, with which it agrees in virtues.

Althæa. *Vide* Roots.

ANAGALLIS AQUATICA.

SECT. I.

Anagallis aquatica, becabunga, *offic.* Anagallis aquatica minor, folio ſubrotundo, *B. P.* 252. Anagallis aquatica flore cæruleo, foliolo rotundiore, minor, *J. B.* iii. 790. Anagallis ſive becabunga, *Ger.* 620. Anagallis aquatica vulgaris, ſive becabunga, *Park.* 1236. Anagallis rectius veronica aquatica, minori folio ſubrotundo, *R. H.* 852. Veronica aquatica minor, folio ſubrotundo, *H. Ox.* ii. *ſect.* 3. t. 24. *H. L.* 622. *T.* 145. Veronica aquatica, rotundifolia, becabunga dicta minor, *R. Syn.* 280. Veronica foliis oppoſitis, lævibus, crenatis; floribus laxe ſpicatis, ex alis, *H. Cliff.* 8. Common brook-lime, *vulgo* water-purpy.

It is very common here in open ſprings, rills, and running ditches; flowering in June. The anagallis aquatica major, folio ſubrotundo, *B. P.* Anagallis aquatica major, & minor folio oblongo, *ejuſdem*, are but accidental varieties, according to *Moriſon* and *Linnæus*. Any of them may be uſed indifferently.

Becca-

Beccabunga or becabunga is ſaid to be a German name. " Quibuſdam " ſium *Dioſcoridis* l. 2. c. 154. ſed folia olus-atri deſunt, & inodora ſunt; aliis " cepæa *Dioſcoridis* l. 3. c. 168. ſed folia portulacæ hæc non habet." *B. P.* 252. We call them purſlane, and purpy; and this water-purpy on account of the ſimilitude betwixt them. " Beccabunga fere creſcit inſtar portulacæ." *Nucl. Belg.* 40. " Cepæa, κηπαια, portulacæ ſimilis eſt, verum nigriora habet folia, " radicemque tenuem. Folia in vino pota, ſtranguria & veſicæ ſcabie la- " borantibus opitulantur." *Dioſcorid.* l. 3. c. 168. p. 241. Vide *Dod.* 593.

SECT. II.

It is an antiſeptic ſubaſtringent vulnerary herb; and commended internally chiefly in the ſcurvy, internal ulcers, and obſtructions of the viſcera; and externally as a diſcutient and detergent.

" Calfacit, moderate humectat. *Uſus Præcip.* in ſcorbuto: urinam, calcu- " lum renum & veſicæ inſigniter expellit, menſes ciet, fœtum mortuum ejicit. " Extrinſecus opitulatur phlegmonis & eryſipelati, maculas faciei abſtergit (cum " furfure) vulneribus medetur (cum ſale comm. & tela aranearum impoſ.) " *Præpar.* 1. Aqua ex integra planta. 2. Succus, expreſſus inſpiſſatus: qui " raro extat." *Schrod.* 533.

1. It is of a diſagreeable bitteriſh taſte, ſcarcely rough or but a-little ſubaſtringent, and no peculiar ſmell. " Sapor plantæ nullus manifeſtus." *J. B. R. H. Geoff.* iii. 161. " Tota planta eſt ſucculenta, inſipida, & temperata." *Nuc. Belg.* 40. " Anagallis, ſive becabunga, *Ger.* tota guſtu eſt naſturtii, " odore non ingrato." *H. Ox.* ii. 324. " It is acrid, bitter, ſtyptic, and red- " dens the blue paper; ſo ſeems to contain a ſalt reſembling the oxyſal dia- " phoreticum *A. Salæ.*" *T. Hiſt.* p. 238. But neither the juice nor ſummitatum thea reddened the blue paper. The ſolution of vitriol turned this tea to a deep green colour; but the tea when weak only diluted ſyr. violarum; and rather greened, than reddened an infuſ. heliotropii: But ſtrong tea (made by macerating the herb four days) did evidently redden a ſolutio heliotropii; and had ſomething of the flavour cochleariæ.—When kept long, it neither becomes ſour or putrid.—2. " Apud veterinarios in magno eſt uſu, ea namque " in diſcutiendis tumoribus, & ſananda equorum ſcabie, aliiſque id genus af- " fectibus curandis utuntur, *teſte Trago.*" *J. B.* iii. 791. It is commended externally for the hæmorrhoides cæcæ, condylomata ani, ſcorbutic ulcers, &c. Vide *R. H.* And—3. Internally for the jaundice, green ſickneſs, ſpleen, rheumatic pains, diſeaſes of the ſkin, &c. It is an " aperiens deterſivum ad ulcus " pulmonum, antinephriticum, & antiſcorbuticum medicamentum lenius;" in *B. Lib. de M. M.* But I am doubtful concerning its antinephritic virtues.

" Analyſi chymica ex beccabungæ floridæ ℔ v. prodierunt, humorum " ℥ivß. 3ij. gr. xxviii, olei 3xii. gr. xxiv. carbonis fuere ʒiv, unde ciner. " 3xij. gr. vi. & inde ſalis fixi ſalſi ʒv. gr. xliv. (ergo terræ ʒvi. gr. xxxiv.) " Jactura fuit ʒix. gr. xx." ſecundum *Geoff.* iii. 161. Whence he concludes its eſſential ſalt is not unlike the *ſal mirabilis Glauberi.* But I cannot ſee any thing wherein they agree.

Authors generally make the brooklime and water-creſſes agree in virtues. " Viribus becabunga cum naſturtio aquatica convenit, niſi quod imbecillior " ſit." (*R. H.*) Although they are very different. " Beccabungam menſes, " fluidoſque & tenues humores ſiſtendi & incraſſandi virtute præditam eſſe, " *Theodorus Corbeius* in ſua *Pharmacia Francofurti edita* 1656, affirmat, expe- " rientia id teſtante." *Geoff.* iii. 161.—But Mr. *Corby* goes too far: its aſtringency is too mild to incraſſate, or ſtop the menſes, in my opinion.

SECT. III.

It may be uſed any way, and in large quantities: *ex. gr.* the green herb may be eaten, as a freſh ſallet: or the juice expreſſed, *per ſe*, or with naſturtium aquaticum may be drank to ℥iv. once or twice a day. It is one of the plants uſed in our ſucci antiſcorbutici.

ANAGALLIS TERRESTRIS.

SECT. I.

Anagallis, anagallis terreſtris, *offic.* Anagallis Phœniceo flore, *B. P.* 252. *T.* 142. *Park.* 558. *R. Syn.* 282. Anagallis mas, *Dod.* 32. *Ger.* 617. *R. H.* 1023. Anagallis Phœnicia mas, *J. B.* iii. 369. Anagallis flore Phœniceo, *H. Ox.* ii. 568. Anagallis foliis ovatis, *H. Cliff.* 52. Male-pimpernel.

It grows in corn-fields, flowering in June and July. The anagallis cæruleo flore, *B. P.* called anagallis fœmina, is but a variety from the colour of the flower: there are ſeveral ſuch varieties. " Anagallidis duo ſunt genera, quæ flore diſtant. Nam quæ cæruleo eſt flore fœmina dicitur; mas quæ Phœniceo. " Frutices ſunt exigui in terra jacentes, quibus folia in quadrangulis cauli- " culis, puſilla, ſubrotunda, ad folia helxines accedentia: fructus rotundus." *Dioſcor.* l. 2. c. 209. p. 165. " Anagallida aliqui corchoron vocant. Duo " genera ejus: mas flore Phœniceo, fœmina cæruleo, non altiores palmo, " frutice tenero, foliis puſillis rotundis, in terra jacentibus: naſcuntur in hor- " tis & aquoſis." *Plin.* l. 25. c. 13. p. 644. The herb is uſed.

SECT. II.

It is attenuant, and diuretic; ſaid to be alexipharmac and vulnerary; and is commended for the ſcurvy, epilepſy, melancholy, madneſs, rabies, plague, conſumption, internal ulcers, the dropſy and gout, &c.

" *Officin.* folia cum floribus, ſed raro. Utraque calfacit & ſiccat, amara " eſt, extergit & ſubaſtringit. Unde & pro vulneraria habetur; morſui canis " rabidi ſubvenire a nonnullis commendatur: adhibeturque uſu interno ac " externo. *Præpar.* 1. Aqua ex integra planta. 2. Succus: raro extat, cum " tamen maxime commendatur in errhinis." *Schrod.* 533. In *Boerh. Lib. de M. M.* Stat utraque inter antiſcorbutica leniora.

1. It is of an acrid, bitterish and subastringent taste, and no smell. Herbæ thea is acrid, irritating chiefly the root of the tongue. It dilutes syr. violarum; reddens a-little tinct. heliotropii; and with solutio vitrioli becomes of a blackish-grey colour. "Sapor totius plantæ acris." *R. H.* "It has an herbaceous, styptic, saltish taste, and reddens much the blue paper; the fruit reddens it more." Vide *T. Hist.* p. 245. and *Geoff.* iii. 90. "Sunt folia sapore fervida." *Boccler. Cyn. Contin.* ii. p. 365.—2. It is commended chiefly in maniac and melancholic deliria, and for the epilepsy. "*Willisius* in mania pro specifico venditat decoctum anagallidis flore purpureo; item summitatum hyperici." *D. Soami e Dolæo. R. H.* 1024. "Mulier quædam Lutetiæ aqua ex Phœnicea anagallide destillata multos suffusione alborantes curavit." *e J. B. Ibid.* 1023. where this water, with milk, is commended for consumptions, and called expertum multoties medicamentum. "In mania succus vel decoctum ad ʒiv. ter die propinatur." *Geoff.* iii. 90.

"Analysi chymica anagallidis maris totius floridæ ℔ v. præbuerunt humorum ℔iv. ʒvß. olei ʒx. gr. xxxiv, carbonis ʒviij. ʒj, unde cinerum ʒiv. ʒvij. ac inde salis fixi salsi ʒij. gr. xxi. & jactura fuit ʒv. ʒvij. gr. xii." secundum *Geoff.* iii. 89. Neither he nor *T.* seem to have tasted this herb.

ANETHUM.

SECT. I.

Anethum, *offic.* Anethum hortense, *B. P.* 147. *T.* 318. *H. Ox.* iii. 311. Anethum, *Dod.* 298. *Ger.* 1033. *J. B.* iii. 2. 6. *R. H.* 415. Anethum hortense, sive vulgare, *Park.* 886. Anethum fructu compresso, *H. Cliff.* 106. Dill, or anet.

It grows without cultivation in *Spain* and *Portugal.* But with us it is commonly sown in gardens, or sows itself there annually; flowering in July. The leaves, flowers or flowering tops, and seeds are used.

It is a small, roundish, flat-margined, brown seed, of a warm aromatic taste, and fragrant heavy smell, stronger than that of fennel.

Anethum, Gr. ἄνηθον. "De cujus etymo nugantur grammatici." *Bod. in Theophr.* p. 743. "Est nisi una planta apud *Dioscoridem* (l. 3. c. 67. p. 201.) & *Galenum* (*Simpl.* l. 6. p. 43. B.) apud *Theophr. Hist.* l. 7. c. 4. plura sunt genera, quæ tamen in digitos non mittuntur. *Dioscorides* cum non describat (*Maranta* 2. *Meth.* 14.) ex aliis ejus locis concinnat, ut & *Cæsalpinus* ex *Theophrasto* solet." *Hoffman.* p. 109. "Ἄνηθον, παρα το ἀνευθειν, quod cito crescat." *B. P.*

"Huc ades, O formose puer, tibi lilia plenis
"Ecce ferunt nymphæ calathis; tibi candida Naïs
"Pallentes violas & summa papavera carpens,
"Narcissum & florem jungit bene olentis anethi.
Virgil. Eclog. 2. v. 45.—An recte *pallentes?*

SECT. II.

It agrees with meum in virtues: it is ſaid to be anodyne and hypnotic; and is commended chiefly for the hiccough, vomiting, flatulent colics, eſpecially the ſeed. The ſummitates, or comæ florentes, are more uſed in anodyne and diſcutient epithems, cataplaſms and clyſters than inwardly.

" Calfacit in principio 3. ſiccat in princ. 2. digerit, diſcutit, maturat, lenit " dolores, auget lac, conciliat ſomnum, venereos appetitus minuit, ſingultui " vomituique medetur. Et hæc omnia præſtat uſu interno & externo. Im- " primis tamen extrinſecus, clyſteribus anodynis immiſcetur, capitiſque cata- " plaſmatis anodynis & ſomniferis (ſummitates cum oleo olivarum coctæ.) " *Præp.* 1. Aqua, ex integra planta, (rari uſus eſt.) 2. Oleum inſolatum, " ex foliis & floribus. 3. Oleum ſtillatitium, ex ſemine." *Schrod.* 534.

1. It is ſweetiſh, ſubacrid, and aromatic, and more diſagreeable to both taſte and ſmell than the fæniculum. 2. " Frequentius potum (comæ ſeminiſ- " que decoctum) oculos hebetat, & genituram reſtinguit." *Dioſcorides* l. c. " Oculis nocere & viſum hebetare dicitur: quod nobis mirum videtur, cum " fæniculo (quod omnium conſenſu viſum acuit) ſimillimum ſit, tam qualita- " tibus, quam facie externa, nec minus potenter flatus diſcutit." *R. H.* But if too much uſed it may prejudice the ſight as much as apium: though both perhaps are vulgar errors. 3. The ſeed is made a ſpecific for the ſingultus: the leaves and tops are little uſed but in pickling cucumbers; and in the oleum anethinum.

" Analyſi chymica ex anethi ſummitatum floridarum ℔ v. prodierunt hu- " morum ℔ iv. ℥iv. ʒj. gr. xxii, olei ℥ij. ʒij. gr. xii. carbonis fuere ℥v. ʒiv. " gr. xii; unde cinerum ℥ijſs. gr. liv. & inde ſalis fixi alcali ℥j. gr. lx. (ergo " terræ ʒxi. gr. lxvi.) & jactura fuit ℥xi. ʒvi. gr. li." Secundum *Geoff.* iii. 91. But here the ſum total is ℔ v. ℥vii. ʒvi. gr. xxiv. ſo that there are 7 ounces, 6 drachms, and 24 grains too much. " Anethum ratione ejus olei & ammo- " nicalis ſalſi, inter carminantia recenſetur medicamenta. . . Vis anodyna a " nonnullis ipſi tribuitur: ſomnum vere conciliare valet, & dolores pacare, " non diverſa ratione ab ea qua crocus, nux moſchata, & alia aromata oleoſa " hujuſcemodi conſopire valent." *Id.* p. 92.

SECT. III.

The ſeed may be given to ʒj. or more: the oleum eſſentiale to gut. v. or vi. on ſugar, or ſome proper vehicle. The *Pharm. Edinb.* retains only the oleum infuſum foliorum, it ſhould be foliorum & florum, or ex ſummitatibus: the *London Pharm.* only the oleum eſſentiale ex ſeminibus.

" Ad ſingultum contumacem a frigida cauſa, ℞ Olei ex ſemine anethi " gut. iv. olei amygdalarum dulcium ℥ß. f. hauſtus. Ad ſingultum nullis " remediis cedentem, hoc unum habuit *Otho Heurnius*." *R. H.*

ANGELICA.

ANGELICA. *Vide* ROOTS, Vol. I.
APIUM. *Vide* ROOTS, Vol. I.

ARTEMISIA.

SECT. I.

Artemisia, *offic.* Artemisia vulgaris major, *B. P.* 137. *T.* 460. Artemisia vulgaris, *Park.* 90. *J. B.* iii. 184. *R. H.* 372. *Syn.* 190. Artemisia latioris folii, *Dod.* 33. Artemisia mater herbarum, *Ger.* 1103. Artemisia latifolia vulgaris major, *H. Ox.* iii. 5. Artemisia foliis pinnatifidis, planis, laciniatis; floribus erectis, *H. Cliff.* 404. Common mugwort.

It is very common indeed in our corn-fields, &c. flowering in July. "Quascunque regiones peragraverim (inquit *Clusius*) nulla fuit in qua Arte-"misiam, universæ, ut puto, Europæ familiarem, crescentem non viderim." *R. H.* No matter whether it be caule purpurascente, or ex viridi-albicante;—the red or white mugwort. The leaves and tops are used. "Herba." *Ph. Edin.* "Folia." *Ph. Lond.* "Summitates, cum semine incluso: quin et to-"ta herba, eaque tum rubra, tum alba." *Schrod.* 539.

"Artemisia dicta, ab *Artemisia, Mausoli Cariæ regis uxore*, quæ hanc sibi, ut "loquitur *Plinius* l. 25. c. 7. p. 636. adoptavit, cum antea παρθενις, *i. e.* virgi-"nalis, quod virgo dea illi nomen dederit, vocaretur. Sunt qui ab *Artemide* "*Ilithia* cognominatam putent; quoniam privatim fœminarum malis, quibus Αρτεμις, *i. e. Diana* præest, medeatur." *B. P.* Mugwort, that is pot-weed; though *Park.* thinks it should rather be called maiden-wort.

There are few simples, which so often occur in *Hippocrates* as artemisia. "Si "secundæ statim a partu non discesserint ... Omnibus autem præstare novi-"mus artemisiam herbam, et dictamnum, ac Leucoii flores." *De Morbis mul.* l. 1. p. 608. But whether this is the plant may be doubted. "Artemisia in "maritimis plerumque nascitur, herba fruticosa, absinthii similitudinem; nisi "quod est majoribus, pinguioribusque foliis: quanquam est quædam lætior, "habitiorque, foliis virgultisque latioribus, altera vero tenuioribus. Flores sunt "parvi, tenues, candidi, et graveolentis: æstate autem floret." *Dioscorides* l. 3. c. 127. p. 226. *Vide Bod. in. Theophr.* p. 1151. where it is not badly described.

SECT. II.

It is a detergent, deobstruent, subaromatic, diuretic, alcalescent, emollient, diaphoretic, and antiscorbutic; called uterine, and commended in obstructionibus mensium et lochiorum, partu difficili, retentis secundinis, and hysteric fits, both outwardly and inwardly used.

"Uterina est, calfacit 1. siccat 2. aperit, discutit, menses, fœtum, secun-"dinas pellit, sordes abstergit; adeoque usus creberrimi est mulierculis, quæ "eam adhibent interne et externe, adeo ut vix balnea, seu lotiones parent in "quibus

" quibus artemisia non contineatur. *N. B.* Rubra efficacior habetur albâ, " proin et communior. *Præpar.* 1. Aqua, ex summitatibus et foliis. " 2. Oleum stillat. (raro extat.) 3. Syrupus compositus. 4. Sal, ex planta " incinerata. *N. B.* Sunt qui carbonem sacro *Joh. Baptistæ* die sub radice fos- " sam, ad epilepsiam commendant. Exhibent autem tum in pulvere, tum " suspendunt de collo." *Schrod.* 539.

1. It is of a subacrid or saltish herbaceous, and as it were bituminous taste, and pretty strong aromatic smell. " Radix, sapore subdulci et aromatico; fo- " lia sunt suaveolentia, sapore dulciusculo et subacri." *J. B.* " Corymbi .. " odore aromatico et satis grato, minus quam absinthii vehementi, ad lavendu- " læ odorem quadantenus accedente." *R. H.* " It has a little saltish herba- " ceous taste, *(l'armoise a un petit gust d'herbe salé)* and reddens a little the blue " paper." *T. Hist.* 177. — 2. Artemisiæ thea has a bituminous, or petroleum-flavour, more remarkably than the herb; it only dilutes syrup of violets; and with vitriol becomes turbid, dark, and greenish. Cum abrotano fæm. convenit. 3. In baths and fomentations it cleans and relaxes the skin, and promotes perspiration: and hence, perhaps, it is so much commended against lassitude. " Artemisiam et elelisphacum alligatas qui habeat viator, negatur lassitudinem " sentire." *Plinius* l. 26. c. 15. p. 664. Elelisphacum is a planta nunc ignota, says Mr. *Geoffroy*, iii. 121. But any dictionary explains it; or *Pliny* himself, l. 22. c. 25. p. 584. " Nostri, says he, qui nunc sunt herbarii, Elelisphacon " Græce, Latine salviam vocant, mentæ similem, canam odoratam." And salvia is as well known as artemisia. " Nuncupatur præterea Belgis, *S. Jeans* " *Krayt*, i. e. herba *S. Joannis*, vel si quis mavult *Jani* . . . Sed cur *Jani* herba " dicta? Non alia de causa videtur, quam quod ejus decoctum hominum ex " itinere lassatorum pedes adeo recreet, ut nihil in rerum natura reperiatur, " quod ei sit conferendum." *Bodd. in Theophr.* p. 1152. Thus also it may be of service in pains, spasms, and tumors. " Novi, inquit *S. Pauli*, vetulam quan- " dam, cujus utraque genua cum obsedisset tumor insignis, oedematosus, quæ " linteis duplicatis, super artemisia suffumigatis, eum ex voto abegit." Vid. *R. H.* 373.—" Coqui duram anserum carnem teneriorem efficere solent, eam " artemisiæ foliis infarciendo, antequam coquantur." *S. Pauli.* 207. *Geoff.* iii. 122.—4. Though internally it is chiefly used for female disorders, yet it is also recommended by some for coughs, nephritic pains, jaundice, dropsy, head-ach, sciatica, &c. It stands among the anti-scorbutica leniora, as well as uterina, in *Boer. Lib. de M. M.* " The fresh herb, or the juice, taken is a special re- " medy, upon the overmuch taking of opium: and three drams of the pow- " der of the leaves, taken in wine, is a speedy, and the best certain help for the " sciatica." *Park.* 92.

As for the coals found at the root of this plant on *S. John's day*, See *Bod. in Theophr.* p. 1152. and *J. B.* 3. 189. *Bodæus* seems to have great faith in their virtue. *J. B.* contemns it, and all such superstitious impositions. Mr. *Geoffroy* thinks, " virtutis non prorsus expertis sunt illi carbones;" but says they are not coals, but old, dead, and dried roots, " semiputrefactione nigri- " cantes factæ." Vid. *tom.* iii. p. 123.

" Analysi chymica ex hujus plantæ recenter collectæ, ℔ v. prodierunt hu- " moris ℔ iv. ℥vij. ʒjß. olei adiposi ʒij. ʒvi. gr. iv. salis volat. gr. xlii. car- " bonis ℥vß. (unde cinerum ʒij. ʒß. et inde salis fixi alcali ʒij.ß. & jactura fuit ʒiij.

ʒiij. gr. lxii. ſecundum *Geoff.* iii. 120. who gives it an ammoniacal ſalt.—Here is little fixed ſalt, and a very ſmall loſs. Does this agree with the tenuitas partium?

SECT. III.

Mugwort may be taken in ſubſtance, infuſion, and any other way ad libitum. Drams, or even ounces, will not do much. Syrupus artemiſiæ comp. kept its place in *Pharm. Edinb.* till 1744, when it was thrown out. "An extract, "conſerve, ſyrup, are prepared from artemiſia ... Some take the leaves and "flowers by way of tea; or in ptiſans for vapours." *T. H.* 177.

ASARUM.
ASPARAGUS. } *Vide* Roots.
ASPLENIUM.

BALAUSTIUM.

SECT. I.

Balauſtium. *Off.* Balauſtium. *Tab. Ic.* 1033. Balauſtia flore pleno, majore. *B. P.* 438. Balauſtia. *Ger.* 1450. *B. Hiſpanica. J. B.* i. 82. Malus punica ſylveſtris major; ſive balauſtium majus. *Park.* 1510. *R. H.* 1463. Punica flore pleno majore. *T.* 636. The balauſtine tree, or double flowered pomegranate.—It is a variation of the

Punica, malus granata, *offic.* Malus punica ſativa. *B. P.* 438. *Park.* 1510. *Parad.* 428. Malus punica, *Dod.* 794. *J. B.* i. 76. *R. H.* 1472.-10. *M.* granata ſive punica, *Tab. Ic.* 1033. *Ger.* 1450. Punica quæ malum granatum fert, *Cæſ.* 141. *T.* 636. Punica *Linnæi, G. P.* 212. *H. Cliff.* 184. The pomegranate tree. This is the malus punica ſylveſtris. *B. P.* improved by culture.

They grow in South-France, Italy, Spain, and other ſouthern countries. Here the winter often kills the tops; and they flower not till September, though they do in May and June in their native climate. We uſe only the balauſtia and malicorium.

Balauſtia, or flores granatæ mali, are large, double, ſcarlet, roſe-like flowers, ſtanding in a thick ſkinny or woody calyx.

Malicorium, ſidium, cortex granatorum *offic.* is the thick firm ſkin of the fruit of the pomegranate tree; both are of an aſtringent taſte, without any ſmell.

"Africa .. circa Carthaginem punicum malum cognomine ſibi vendicat; "aliqui granatum apellant." *Plin.* l. 13. c. 19. p. 333. Communiter malum "granatum, ab interiorum granorum multitudine: aliis a granata Hiſpaniæ "regione. quod in ea copioſe proveniat." *B. P.* 437. It is in *Theophraſtus* and "*Dioſcorides* ῥοα, which is the name of the fruit alſo.---By *Hippocrates* it is called σιδη (whence σιδιον cortex fructus:) though he alſo uſes ῥοιης. l. 11. *de Morb. Mul.* p. 641. l. 40.

Cytini, κυτινοι are the flores ſativæ punicæ in *Dioſcorides* and in *Galen, Simpl.* l. 6. p. 59. *H.* (and in ſundry other places, as κατ. τοπ. l. 4. c. 8. p. 157. he ſays, mali punici

punici ſativi flores cytini appellati). But l. 6. κατα τοπους p. 168. *G.* Cytinus is fructus rudimentum: It is the calyx in *Theophraſtus* and *Pliny*.—Balauſtium is the flower of the fertile punica of *Plin.* (l. 23. c. 6. p. 599.) But flos ſylveſtris, according to *Dioſcorides*. Vide *l.* 1. c. 151---154. p. 76, 77. "Ex acerbis punicis hic vulgus coria maxime perficere novit, ob id malicorium apellant medici." *Plin.* l. 23. c. 6. p. 599. Vide *B. P. J. B.* and *Bod.* in *Theophraſtum*.—"Primus "pomi hujus partus, florere incipientis, cytinus vocatur Græcis . . . In hoc "ipſo cytino floſculi ſunt, antequam ſcil. malum ipſum prodeat, erumpentes, "quos Balauſtium vocari diximus." *Plin.* l. 23. c. 6. p. 599.

SECT. II.

They are aſtringent, and uſed in fluxes and hæmorrhages, inwardly and outwardly, like tormentil or biſtort. The doſe in ſubſtance is ʒi. to ʒij; in infuſion or decoction to ʒß.

"Flores, tam balauſtia quam cytini, ejuſdem ſunt naturæ terreſtris ſcil. va- "lidè adſtringentis, inſpiſſantis, refrigerantis, ſiccantis, unde et balauſtiorum "creberrimus uſus eſſe ſolet in omnis generis fluxionibus. *e.g.* diarrhœa, dyſente- "ria, uteri fluore et ſimilibus, in ſanguine vulnerum cohibendo, in gingiva- "rum laxitate emendanda, in hernia curanda, &c. Cortex (malicorium, pſi- "dion) ejuſdem cum floribus cenſetur naturæ, præcipuique uſus eſt in ſedan- "do fluxu hæmorrhoidum, narium, uteri, &c." Vid. *Schrod.* 598.—For,

They are of a ſtyptic taſte, make ink with vitriol like galls, tan leather as well as oak-bark, and by every experiment are ſtrongly aſtringent. Some make them diuretic, others anthelmintic, &c. Vide *J. B.*

BETONICA.

SECT. I.

Betonica, betonica vulgaris. *Offic.* Betonica purpurea. *B. P.* 255. *T.* 203. Betonica *Dod.* 40. *Cluſ. H.* ii. 39. *Ger.* 714. *R. H.* 550. *Syn.* 238. *B.* Vulgaris purpurea. *J. B.* iii. 301. *H. Ox.* iii. 365. *B.* vulgaris, flore purpureo, *Park.* 614. Betonica *H. Cliff.* 310. Common or wood betony.—It grows in woods, thickets, &c. flowering in July: The leaves and flowers are uſed. It is more common in our gardens than woods.

"Ceſtron, quod pſychiatrophon vocatur, quoniam frigidiſſimis in locis re- "periatur, Romani vetonicam (βετονικην, *al.* ξεττονικην) ſeu roſmarinum (ροσμα- "ρινυμ) apellant: herba eſt caulem proferens tenuem, cubiti altitudine, aut "etiam majorem, quadrangulum: folia longa, mollia, quernis ſimilia, in am- "bitu inciſuris diviſa, boni odoris, ac prope radicem majora: ſemen in ſummi- "tate caulium, thymbræ modo ſpicatum ineſt. Decerpta hujus folia ſiccari "oportet; quippe quorum ſit etiam major et frequentior uſus. Radicis vero "ſubſunt tenues ſeu ellebori: quæ quidem ex hydromelite potæ pituitoſam "vomitionem evocant." *Dioſc.* l. 4. c. 1. p. 245. Invenere herbas et univerſæ "gentes. . .Vettones in Hiſpania eam, quæ vettonica dicitur in Gallia, in Italia, "autem Serratula, a Græcis ceſtron aut pſychotrophon, ante cunctas laudatiſ-

" sima. Exit anguloso caule, cubitorm duum, a radice spargens folia fere La-
" pathi serrata, semine purpureo." *Plin.* l. 25. c. 8. p. 637.

There is a libellus de betonica, attributed commonly to *Augustus*'s physician, *Ant. Musa*; by some to *L. Apuleius*; of which there are said to be very antient MSS. " In optimis bibliothecis quibusdam asservantur libelli hujus " exemplaria manuscripta antiquissima . . . Septem et quadraginta morbis sa-
" nandis, ibi est efficax, una planta." *Rieger Introd.* ii. 144. *J. B.* iii. 302. has more than a column from it; and thus he begins: " Herba betonica " nascitur in pratis, et montibus mundis, et opacis, circa frutices. Animas " hominum et corpora custodit, et nocturnas ambulationes a maleficiis et " periculis. Loca sacra et busta a visib. metuendis tuetur et defendit: de-
" nique res omnino sancta est." Vide *J. B.* or rather *S. Paulli Q. B.* p. 219. ad 222.

De hac singularem librum scripsit *A. Musa*, *Augusti* imperatoris medicus, unde in tanto pretio cœpit esse, ut Italico proverbio diceretur *Vende la tonica è compra la vetonica.* Iidem laudaturi aliquem plures dicunt habere virtutes quam vetonica. *Hoffman* 129.

SECT. II.

It is a detergent deobstruent, and diuretic, and probably also cathartic; called cephalic, pectoral, hepatic, uterine: and is recommended internally in the head-ach, vertigo, palsy, the consumption, gout and gravel; and externally as an errhine, or rather ptarmic.

" Calfacit et siccat. 2. Acris est et amara, discutit, attenuat, aperit, extergit:
" imprimis cephalica est et epatica, splenetica, thoracica, uterina, necnon et vul-
" neraria, et demum diuretica: hinc usu interno et externo creberrimo venit,
" maxime in morbis capitis. *Præp.* 1. Aqua ex foliis vel floribus. 2. Conser-
" va ex floribus. 3. Syrupus ex succo. 4. Syr. compositus. 5. Emplastrum.
" 6. Sal ex incinerata planta." *Schrod.* 547.

1. It is of an unpleasant bitterish taste, and somewhat aromatic smell. " Fo-
" lia sapore aromatico prædita." *J. B.* " The leaves have an herbaceous
" taste, a little saltish; they are a little aromatic, and do not redden the blue
" paper: the flowers redden it but very little, as also the root, which is consider-
" ably bitter." *T. Hist.* p. 320. 2. Betony tea is of a greenish or herbaceous taste, a little bitterish rather than saltish: vitriol makes it dark, and greenish, but not turbid. It does not redden the blue paper; though it reddens a little the solutio heliotropii. 3. The powder, as well as green leaves, of betony provoke sneezing; and thus are said to purge the head: and externally applied, it is said to be anodyne and discutient, and to comfort the head and nerves. Some smoke it per se, or with tobacco, for diseases of the head. " Morsibus
" imponitur vettonica præcipue, cui vis tanta perhibetur, ut inclusæ circulo ejus
" serpentes, ipsæ sese interimant flagellando." *Plin.* l. 25, c. 8. p. 639. Yea the smell of it is said to make people drunk and delirious. " Nonnulli vim
" anodynam et fere inebriantem in ea observaverunt. *Simon Paulli in Quad.*
" *Bot.* refert quasdam edentulas anus occupatas in eruenda et eradicanda beto-
" nica, eaque transplantanda in distantiorem areolam, sole sub ardente cernu-

" as et conquiniſcentes, a nimia betonicæ fragrantia temulentas factas fuiſſe, " et miros, ridiculoſque corporis geſtus egiſſe. *Bartholinus in Hiſtoria Anatom. Obſervationum*, cent. 3. obſ. 97. " Recenſet quod cum hortulani operarii hero " ſuo evellere voluiſſent betonicam, pro uſu medico, omnes velut temulenti et " ebrii titubarint. Quæquidem vis oritur a betonicæ recentis et vegetæ ſub- " tili ſulphureo ſpiritu cerebrum et nervos feriente." *Geoff.* iii. 185. I am afraid the hot ſun, or liquor, was more to blame than the betony, which I have often eradicated and tranſplanted, without being ſenſible of its nimia fragrantia, or intoxicating quality: and have ſeen many keep a leaf of it long in their noſe, but never knew it do any prejudice. 4. Since not only the antients but ſo the moderns make the root emetic; and *Dioſcorides* ſays the herb is purgative; and ſince the recent herb is to me nauſeous, and has rather a rank, than an agreeable aromatic flavour, I think it more than probable that taken in a ſufficient quantity it is cathartic.—" Herba... Urinas ciet, alvumque ſubducit. " ..Drachmis vero iv. bibita in aquæ mulſæ cyathis x. alvum purgat." " *Dioſcor.* l. c. Radices multum ſtomacho oriquæ ingratæ, nauſeam, rugitus. " Vomitumque cient. Folia è contra odora aromatica, et grato ſapore, nonni- " hil roborante, cibo et medicamento naturæ amica." *J. B.* Hence it is an efficacious diſſolving, as well as ſtimulating medicine. Yet, 5. It is too much commended by many, and not well underſtood; as well as unjuſtly excluded the *M. M.* by others. It is made a remedy for the gout, head-ach, and nervous diſeaſes. *R. H.* For the ſciatica, jaundice, palſy, internal ulcers, ſtuffing of the lungs, obſtructions of urine, bites of mad dogs, *&c. T. H.* and *J. B.* to ſay nothing of the extravagant praiſes given it by the antients. " Betoni- " ca diſcutit, attenuat, aperit, et abſtergit. Imprimis cephalica eſt, hepatica, " ſplenetica, thoracica, uterina, diuretica, antiarthritica, et vulneraria." *Geoff.* iii. 185, &c.

Analyſi chymica foliorum betonicæ ℔ v. præbuerunt humoris ℔ iv. ʒ iv. ʒv. " gr. xlviii. (all more or leſs acid) olei ʒx. carbonis ʒv. ʒiij. gr. xviii. unde ci- " nerum ʒij. ʒv. gr. xxx. et inde ſalis fixi alcali ʒiv. gr. xlviii. (ergo terræ ʒij. " gr. liv.) jactura fuit ʒiv. ʒv. gr. vi." Secundum *Geoff.* iii. 184. who adds, " Flores multum plus olei præbent."

SECT. III.

The doſe may be to ʒi. or ʒij. in ſubſtance; to ʒß. in infuſion. Conſerva florum betonicæ, & emplaſtrum de betonica, were left out of our diſpenſatory only in 1744. The leaves are uſed in the pulvis cephalicus: and the aqua pæoniæ compoſita has the ſummitates.

" Foliorum vel recentium vel exſiccatorum M. i. in aqua bulliente macera- " tur theæ ad inſtar, aut in ℔i. decoquitur. Flores a nonnullis ad hunc uſum " anteponuntur. Syrupus vel conditum ab ʒß. ad ʒi. foliorum ſuccus ad ʒiv.; " vel extractum ad ʒß. preſcribuntur, et iiſdem virtutibus inſtruuntur. In " hæmicrania, vertigine, membrorum ſtupore et paralyſi, hæc omnia uſur- " pantur. Expectorationem promovent, et ulcera interna detergunt, et ad " cicatricem perducunt." *Geoff.* iii. 185. Theſe doſes are ſtrangely proportioned. Are the dried and green leaves of the ſame ſtrength, in the ſame quantity, with the extract, or with one another? Is ſyr. ʒi. as good as ſucci ʒiv.? and

ſo

ſo on. For if man. i. foliorum be a doſe, ſucci ʒi. and extracti ʒi. are too much; and ſyr. ʒi. too little. But here is no danger. "Ex omnibus (plantarum ſuccis expreſſis) quos expertus ſum, betonicæ vulgaris dilutiſſimus eſt, et minime coloratus." *D. Sam. Fiſher. R. H.*

BORRAGO.

SECT. I.

Borrago, *offic.* Bugloſſum, latifolium, Borrago. *B. P.* 256. Borrago floribus cæruleis. *J. B.* iii. 574. *T.* 133. *R. H.* 493. Borrago. *Park. par.* 249. Borrago. *Dod.* 627. Borrago hortenſis. *Ger.* 797. *H. Ox.* iii. 437. Borrago hortenſis. *Ger. R. Syn.* 228. Borrago, calycibus patentibus. *H. Cliff.* 44. Borrage.—Which ſown in the gardens flouriſhes very plentifully; and flowers all the ſummer. Is it a native? "In hortis, viis et muris frequens." *R. Syn.* "It grows in gardens, but is found wild in divers places near houſes, and upon walls; and flowers in June." *Miller Bot.* p. 90. "Borrage and bugloſs grow only in gardens with us." *Park. Par.* 250. It is not indigenous in Scotland: I think, at leaſt *Sutherland* does not mark it as ſuch. "Nos cum plurimis aliis ſeminibus, ex Aleppo recipimus." *H. Ox.*—"The radix, herba, flores, are uſed in the ſhops, according to *Scrod.* 549. and *Dale* 136. The leaves and flowers are uſed by *Miller.* Flores only are mentioned in *Ph. Edinburgenſis.*

This is the bugloſſum of the ancients, according to *Matthiolus*, *Cordus*, *Dodenæus*, &c. Vide *B. P.* "Bugloſſum naſcitur in campeſtribus et ſabuloſis. Julio menſe colligitur. Aiunt eam quæ tres thyrſos omittit, cum ſemine et radice tritam potamque, contra tertianos horrores prodeſſe: quæ quatuor ad quartanos: ea in vino decoquitur. Herbam abſceſſibus utilem eſſe aiunt. Verbaſco ſimile eſt, folium in terra ſparſum, nigrius aſperum, bubulas imitans linguas. Quod in vinum dejectum animi voluptates auget." *Dioſcorides Mathioli* p. 824: all which to verbaſco is taken from the *Notha Dioſcoridis*, or is ſpurious. Vide *Saracen.* p. 471. "Bugloſſum verbaſco ſimile eſt, folio in terra ſparſo, verum aſpero, nigriore, minoreque bubulæ linguæ ſimile: quo vino inditum animi voluptatis augere, hilaritatemque afferre creditur; εὐφροσυνον δοκει ειναι. *Dioſcor.* l. 4. c. 128. It is *Avicenna*'s bugloſſum. *Can.* l. 11. and what the *Lucani* call corago. Vide *Matth.* l. c. "*Plutarchus Sympos.* lib. 1. queſt. 1. Bugloſſum fuiſſe eam plantam (nepenthes *Homeri*) talemque a veteribus habitam innuit, licet illud ἀλληγορικως, paulo poſt interpretatur: in quam quoque ſententiam ivit *Macrobius Saturnal.* l. 7. c. 1. Sed *Cælius Rhodiginus*, et *Joannes Spondanus* minime allegoriam fuiſſe probant, ſed verum pharmacum, ac ipſum quidem, ut probabile videtur, bugloſſum." Thus *Renatus Moreau in Schol. Salern.* p. 333. And in the *Schola Salernitana*, c. 21.

"Vinum potatum quo ſit macerata bugloſſa,
"Mærorem cerebri dicunt auferre periti,
"Fertur convivas decoctio reddere lætos." *Ib.* p. 330.

Quatuor flores cordiales ſunt flores borraginis, bugloſſi, roſarum et violarum. Of the two laſt I ſhall ſpeak afterwards: but the firſt two cannot be ſeparated.

Bugloſſum, bugloſſa, *offic.* Bugloſſum anguſtifolium, majus. *B. P.* 256. Flore cæruleo. *T.* 134. *B.* Vulgare ac majus. *J. B.* iii. 578. Bugloſſum. *Park. Par.* 249. *B.* Vulgare, *Park. R. H.* 493. *B.* perenne, majus ſativum. *H. Ox.* iii. 438. Bugloſſa vulgaris. *Ger.* 798. Anchuſa Alcibiadion. *Dod.* 629. Anchuſa, foliis lanceolatis, ſpicis imbricatis, ſecundis. *H. Cliff.* 46. Great garden bugloſs.

It grows in Germany, France, Sicily, &c. In gardens it flowers in June and July. The roots, flowers and leaves, are *officinal* in *Ph. Edin.* as well as in *Schroder*, &c. " Officinalis eſt ſine diſcrimine, ſive cæruleos ferat flores, ſive " albos, quæ hic æque vulgares." *Schroder.*

SECT. II.

They are diluent and antacrid detergents. And ſo are cooling, deobſtruent, and diuretic. They are called cordial; and recommended in lowneſs of ſpirits, lipothymies, melancholy, malignant fevers, &c. The leaves are as good as the flowers.—Bugloſs root is more antacrid, becauſe more viſcous, than the other parts. In ardent fevers, hard coughs, and heat of urine, and the like, they may do ſervice.

" Borrago cordialis eſt e præcipuis, calfacit et humectat, 1. Atram et aduſ- " tam bilem corrigit; ſpiritus vitales, et animales, fuligine atrabiliaria inqui- " natos, mundificat, unde et omnibus affectibus, ex atra bile oriundis conve- " nit, v. g. hypochondriacis. *Præp.* 1. Aqua duplex; ex toto, et ex floribus. 2. Conſerva; ex floribus. 3. Syrupus. 4. Succus inſpiſſatus, ſive eſſentia. *Schrod*, p. 548. " Bugloſſum vires eaſdem obtinet quas borrago. Præparata " eadem quæ borraginis." *Schrod.* p. 550.———I obſerve,

1. They are inſipid to the taſte, and have no proper ſmell; but abound with a viſcid, or glutinous juice; eſpecially the roots. " Borraginis radix manſu " viſcida. Bugloſſi radix eſt guſtu lento." *J. B.* " The roots of bugloſs " are very glutinous, and redden much the blue paper; the flowers redden it " but little; and the leaves almoſt not at all." *T. Hiſt.* p. 251. " Borrago " tota continet ſuccum viſcoſum, ſaporis fatui." *Nucl. Belg.* 46. Do not acids turn the flowers red, as eaſily as the blue paper?—2. Any part of them, that is the root, leaves, and flowers, yea and ſtalks too, before they grow woody, may be, and are by ſome eaten like other pot-herbs and roots.——3. " Borrago exſiccata, et ſuper prunas projecta, comburendo, plurimas edit ful- " gurationes nitri ad inſtar, et revera ſalem eſſentialem continet nitroſo-ammo- " niacalem, qualis ex miſtura ſpiritus nitri et ſpiritus urinæ exurgeret." Cætera Vide in *Geoff.* iii. p. 202. Hence—4. Though they are cold cordials, yet they may be of uſe in many diſeaſes where bilious, putrid, or ſaline acrimony in the fluids, or rigidity of the fibres offend: and ſo may be numbered among the olera emollientia, aperientia, deterſiva adulcera interna, et antinephritica vegetabilia: alſo among pectorals, laxatives, &c. " *Galenus* in tuſſi ab aſperitate " gulæ uſurpat . . . Folia in cibo alvum molliunt." *Hoffman* p. 136. Sect. 4.

" Audivi hypochondriacos dicentes ſe valde adjutos, ab eſu florum bor-
" raginis in acetario." *Ibidem.* " In ſuppreſſione menſium nonnullis arcanum
" eſt conſerva borraginis, in vino albo tenui ſoluta." *J. Mart. Obſerv.* 50. " *R. H.*"

" Analyſi chymica, ex totius borraginis recentis cum radicibus ℔v. prodie-
" runt humoris ℔iv. ℥x. ʒv. gr. iij. (in all which there is little acid) ſalis vola-
" tilis gr. xi. olei ʒv. gr. iii. Carbonis ℥ij. ʒij. gr. lx. unde cinerum ʒx. gr. li.
" ac inde ſalis fixi alcali ʒv. gr. xxiv. (ergo terræ ʒv. gr. xxvii.) et jactura fuit
" ℥i. ʒx. gr. lxvii." Secundum *Geoff.* iii. 202.

" Ex bugloſſi foliorum recentium ℔v. prodierunt humoris ℔iv. ℥x. ʒij.
" gr. lxxi. ſalis volatilis gr. lx. olei ʒvij. gr. lxii. Carbonis ℥iij. unde cinerum
℥i. ʒvij. gr. lxvi. et inde ſalis fixi alcali ʒvi. gr. xlii. (ergo terræ ʒix. gr. xxiv.)
ac jactura fuit ʒxii. gr. xxiii." Secundum *Geoff.* iii. 227. " Bugloſſi folia ex-
" ſiccata et prunis impoſita accenduntur, et leves emittunt fulgurationes, quales
" ſale nitri in prunas projecto exurgere ſolent. Ex quibus concludere licet,
" ſalem huic plantæ ineſſe eſſentialem nitroſo-ammoniacalem." *Geoff.* l. c.
Who ſays, and juſtly, eaſdem vires obtinet quas borrago: and commends them both in affectionibus melancholicis et hypochondriacis, in febribus inflammatoriis, pleuritide, peripneumonia, cordis palpitatione, cachexia, &c. Yet by the analyſes, there appears to be a conſiderable difference in the proportions of the principles they yield. It is alſo obſervable that they contain very little acid, and are rather alcaline, than aſceſcent; and ſo appear to be ſaponaceous and emollient: and to have the virtues of althæa and parietaria conjoined.

" *Joan. Henrici Hottengeri, M. Tigurini, De Borraginis noxa Obſervatio,*
" Extat in *Miſc. Acad. Nat. Cur.* Dec. 3. an. 9. and 10. Obſ. 224." *Seguierii. B. B.* p. 266.

Do the leaves flaſh like nitre in the fire?

SECT. III.

They may be eaten by pounds, like cabbage, any way. The conſerve is unknown here. They are but little uſed any where; and are excluded the *London M. M.*

" Florum ... pug. 1. aut alter in liquoris idonei cyatho uno infuſus inſtar
" theæ, præſcribitur, aut eorum conſerva a ʒij. ad ℥ß. Folia et radices in de-
" coctis bechicis, in juſculis alterantibus et refrigerantibus uſurpantur. Succus
" expreſſus et defoecatus, ad ℥iv. vel vi. pro doſi ſumitur in pleuritide, et tertia
" vel quarta quaque hora iteratur. Sæpe ſudorem movet, ſanguinem ſpiſſum
" et fere coagulatum reſolvendo." *Geoff.* iii. 228.

BURSA PASTORIS.

SECT. I.

Burſa paſtoris. *offic.* Burſa paſtoris major; folio ſinuato. *B. P.* 108. *T.* 216. Burſa paſtoria. *Dod.* 103. *J. B.* ii. 936. B. paſtoris. *Lob.* 110. *Adv.* 76. *Ger.* 276. B.

276. B. Paſtoris major, vulgaris. *Park.* 866. B. Paſtoris major, capſula cordata; foliis ſinuatis, *H. Ox.* ii. 304. Thlaſpi fatuum; burſa paſtoris dictum. *R. H.* 838. *Syn.* (edit. 2.) p. 176. Burſa paſtoria, *J. B. R. Syn.* (edit. 3.) 306. Thlaſpi, ſiliquis verticaliter cordatis, *Lin. Fl. Lap.* 209. *H. Cliff.* 330. Shepherd's purſe.

It is common every where almoſt by the way ſides, &c. flowering and ſeeding all ſummer. "Thlaſpi ſpecies apud antiquos fuit, quæ nunc burſa paſtoris, a marſupiolis compreſſis (aliis capſella) dicitur: quibuſdam ſanguinaria et criſpula." *B. P.* The herb is uſed.

SECT. II.

It is antacid, detergent, and diuretic; ſaid to be aſtringent; and is recommended in fluxes and hæmorrhages; but differs not from the eryſimum in virtues.

"Refrigerat, ſiccat, aſtringit, et conſtipat; hinc valet in hæmorrhagia narium, expuitione ſanguinis, diarrhœa, dyſenteria, mictione cruenta, fluore nimio mulierum. Externe vulneribus ſolidandis, a plebeis adhiberi ſolet, nec ſine ſucceſſu: uti et hæmorrhagiis narium (ſub aliis et in nucha). Quinimo adhibetur ſæpius in cataplaſmatis febrifugis, quæ carpis imponunur.—*Præpar.* aqua ex foliis." *Schrod.* 550.

1. The leaves are almoſt inſipid, but the flowering tops are hot and biting to the taſte, "It is of an herbaceous taſte, a little ſaltiſh, and as it were deterſive. The juice of the leaves reddens a little the blue paper . . . It does not yield much acid by a chemical analyſis; all drawn from it is almoſt alcaline: there are few plants which yield more volatile ſalt, more fixed lixivial ſalt, and more earth . . . By the conſent of all authors it is vulnerary and aſtringent, &c." Vide *T. Hiſt.* p. 11. But neither juice nor infuſion redden the blue paper; nor turn purple or black with vitriol; nor is its fixed ſalt an alcali.—2. B. paſtoris ſiccatæ cum toto, ℥iij. ℥vi. well calcined gave cinerum ʒiij. gr. liß, the lixivium whereof made no ebullition with acid ſp. vitrioli, nor ſp. aceti. Neither did its fixed ſalt, of which it yielded gr. xiiß. the diſtinct cryſtals whereof, were beautifully pellucid ſlender priſms of ſix unequal ſides and angles; which thrown on a live coal, cracked, ſplit, and flew-off like ſea-ſalt.—3. It eaſily putrifies, and by long drying loſes all its acrimony; as all the tribe do, to which it belongs.—4. Almoſt every author makes it cooling as well as aſtringent: only *Lobel* and *Pena* I think differ from the multitude. "Burſa paſtoris . . . ubivis notiſſima . . . foliis et facie Irionis aut erucæ floribus albicantibus, thlaſpi non diſſimilibus, tametſi guſtu non perinde acri, ſed exſiccante potius quam refrigerante. Nam qui, quia ſanguinem ſiſtit (ſiſtit autem ſtrenue) frigidam faciunt, infelici argumento nituntur, etenim umbellæ, floreſque guſtanti, aliquid acrimoniæ inurunt, indicioque ſunt ſiccando colligendoque ſiſtere, ut porri ſuccus, vitriolum, urtica, non refrigerando." *Adv.* p. 76. Probably its aſtringency has been owing to ſome miſtake. "*Guido* nimis licentioſe *Galeni* locum interpretans, ait polyganum eſſe virgam vel burſam paſtoris. Polygonum et burſa paſtoris multum differunt." *J. B.* I have not found this in *Guido de Cauliaco's Chirurgia*, among the medicinas

frigidas repercuſſivas, he has virga and burſa paſtoris. *Tract.* 7. c. 5. p. 390 & c. 8. p. 413. "Burſa paſtoris, ſays he, herba eſt frigida et ſicca cum ſtrictio-" ne." But of this formerly.—See the Introduction.

Analyſi chymica burſæ paſtoris floridæ ℔v. præbuerunt humoris odoris et ſaporis quaſi ſulphurei et alcalini ℔iijß. ʒij. gr. xxxviii. humoris primo obſcure ſalſi et urinoſi, ac tandem intenſe alcali, urinoſi et obſcure acidi ℥xii. ʒvi. gr. xii. humoris ſale volatili urinoſo copioſo impregnati ℥iß. gr. xlviii. carbonis ℥v. ʒij. gr. lx. qui calcinatus reliquit cinerum ℥iij. ʒi. gr. vi. unde ſalis fixi mere alcali ʒvi. gr. iv. (ergo terræ ℥ij. ʒiij. gr. ii.) partium jactura in diſtillatione fuit ℥i. ʒv. gr. xxvi. Secundum *Geoff.* iii. p. 233. He adds, "Herba integra ſapo-" rem herbaceum, ſubſalſum, nonnihil adſtringentem, aliquantiſper glutino-" ſum. Succus foliorum chartam cœruleam, rubro colore tingit... Salem " igitur ammoniacalem continet, cum aluminoſi portione." Compare him with *T.* l. c. It muſt be aſtringent, and therefore muſt have an aſtringent taſte, and aluminous ſalt, in ſpite of fact. Hence he commends it "in hæmorr-" hagiis quibuſcunque; in diarrhœis, dyſenteriis, alvi profluviis, et gonor-" rhœa. In mictu cruento, ſays he, ſpecifica habetur. Ipſi quoque febrifuga " virtus tribuitur." And outwardly in hæmorrhages. "Imprimis planta " contuſa, et naribus indita, vel in nucha, vel ſub axillis utriſque applicata, vel " in ea manu detenta, ex quo latere nares ſanguinem fundunt, narium hæ-" morrhagias ſiſtit... Tota planta a quibuſdam in ictero commendatur, cal-" ceis indita et nudis pedibus admota." Vide p. 233, &c. he ſays, "In aqua " vel vino rubro ad m. i. vel ſuccus defæcatus ad ℥iv. vel ℥vi. vel foliorum " pulv. ʒi præſcribuntur, et in juſculis, apozematibus, et clyſteribus recipiun-" tur." Its juice is one of the uſeleſs ingredients of our emplaſtrum defen-ſivum.

LECTURE LIV.

CALAMINTHA.

SECT. I.

CAlamintha. Calamintha montana. Calamintha vulgaris. *Offic.* Cala-mintha vulgari, ; vel officinarum *Germaniæ*. *B. P.* 228. *T.* 194. Cala-mintha, flore magno, vulgaris. *J. B.* iii. 228. C. montana. *Dod.* 98. C. montana vulgaris. *H. Ox.* iii. 413. C. vulgaris officinarum, *Ger.* 687. C. vulgaris. *Park.* 36. *R. H.* 569. *Syn.* 243. Meliſſa, floribus ex alis ſuperio-ribus, pedunculo communi, confertis. *H. Cliff.* 307. Common calamint.

In our gardens it ſeldom lives above three years, flowering in June and July, and plentifully ſowing itſelf. It grows in England, "In viis publicis, et " ad aggeres ſepium et foſſarum, ſed rarius." *R. Syn.* The leaves and tops are uſed: and as a ſuccedaneum, calamintha pulegii odore, ſive nepeta. *B. P.* 228. Cal. odore pulegii. *Ger.* 687. *R. H.* 569, *Syn.* 243. Meliſſa, floribus ex alis ſuperioribus, pedunculo dichotomo, caule procumbente. *H. Cliff.* 308. Field calamint. Which is the calamintha *Pharm. Londinenſis*, non magno er-

rore

rore, though the former is generally preferred. The old *Lond. Ph.* had alſo calamintha paluſtris, i. e. Calamintha arvenſis verticillata *B. P.* 229. Mentha arvenſis, verticillata hirſuta. *J. B.* iii. 217. Mentha floribus verticillatis, foliis ovatis, acutis, ſerratis. *H. Cliff.* 307. and thus there may be as many calaminthæ as are mentioned by Dioſcorides. But that they are the ſame I cannot ſay. "Καλαμινθη, quaſi bona et utilis mentha, nidore omni ſuo, ut habet "*Ariſtophanes*, ſerpentes, vel accenſa vel ſubſtrata, ait *Dioſcorides*, fugare "ſolet." *B. P.*

"Ex calaminthæ generibus quædam montibus familiaris, folia habet ocimi, "incana, ſurculos et caules anguloſos, ac florem purpureum. Altera pulegio ſi-"milis eſt, ſed major, quam ſylveſtre pulegium ideo vocarunt, quod et odore "ipſum æmuletur: hanc Latini nepetam vocitant. Tertia menthaſto cogna-"ta eſt, foliis oblongioribus, caule et ramis, quam ſuperiora genera majoribus, "ſed viribus inefficacior. Omnium folia guſtu impenſe ferventia et acria ra-"dix ſuperba. Naſcitur in campeſtribus locis, aſperis et præhumidis." *Dioſcorides* l. 3. c. 43. p. 190.

SECT. II.

It is an acrid ſtimulating aromatic; or attenuating diaphoretic, diuretic, and antiſeptic; called ſtomachic and uterine: internally it is recommended in phlegmatic and flatulent diſeaſes of the ſtomach and guts; obſtructis menſibus and other ſuch female diſeaſes; and externally, as diſcutient and anodyne, in inflammations uteri, &c.

"Calfacit et ſiccat, aperit, attenuat, diſcutit, extergit, partium tenuium eſt, "ſtomachica ac uterina imprimis; hinc et pectoralis atque epatica: menſes "ciet, fœtum ejicit, urinam movet, tuſſi medetur, epar reſſerat. *Præp.* 1. Aqua "ex planta integra. 2. Sal ex cinere. 3. Syrupus compoſitus. 4. Species "diacalaminth." *Schrod.* p. 552.

1. It is of a warm, penetrating, aromatic taſte, and fragrant ſmell, ſomewhat like pulegium. "Odoris eſt aromatici, ad mentham accedentis, ſaporis "caladi, acris." *Nucl. Belg.* p. 53. "Saporis acris, odoris grati." *Geoff.* iii. 239. "The leaves and flowers have a pleaſant aromatic ſmell, ſomewhat like "wild mint." *Miller Bot.* 101. — 2. Summitum thea is of a ſubacrid, ſubaromatic, and not diſagreeable taſte, and ſmells a little of the herb: it only dilutes ſyr. violarum; reddens very little a ſol. Heliotropii; and turns a ſol. vitrioli turbid and of a greeniſh black, the mixture ſoon precipitating.—3. Externally it has much the ſame effects with other aromatics; and in many things agrees with the mints. "Externe pubi ad inflammationem uteri, ut et capiti "ad vertiginem, et ventriculo ad vomitum applicatur." *Herman Cynos.* p. 471. "This plant is full of a ſal volatile oleoſum aromaticum." *T. Hiſt.* 405. "Ca-"laminthæ ſpecies (of which he has the above three, and C. magno flore. "*B. P.*) ſali eſſentiali ammoniacali donantur, cum oleo aromatico copioſo "conjuncto." *Geoff.* iii. 240. No analyſis is given of either: neither is the doſe. Only the laſt author ſays, among other things, "ulcera renum deter-"gunt; et pulmonibus exulceratis auxiliantur, ex infuſo theæ modo aſſumptæ."

SECT.

SECT. III.

It may be given in powder to ʒi. and more if not too bulky: in infusion to ʒß. It is used in the theriaca; and was in the syr. de artemisia.

CALTHA.

SECT. I.

Caltha, calendula. *Offic.* Caltha vulgaris, *B. P.* 275. *T.* 498. Caltha flore simplici. *J. B.* iii. 101. *H. Ox.* iii. 13. Calendula. *Dod.* 254. Calendula, flore simplici. *Ger.* 139. C. simplex, *Park. Par.* 296. C. sativa. *R. H.* 337. Calendula, seminibus radii cymbiformibus, echinatis; disci bicornibus. *H. Cliff.* 425. Common garden marigold.

It grows in France, Italy, &c. in gardens; and flowers almost all the summer and autumn. It varies much in the colour. "Caltha Græce καλχα, "siculis καλθα, unde corruptione calthula, caldula, caledula, calendula. (E "Vossio.) Vide *R. H.* "Calendula, quod singulis fere mensium calendis "floreat, eaque de causa. *Fior d'ogni mense* ab *Italis* vocatur." *H. Ox.*

"Tum casia, atque aliis intexens suavibus herbis,
"Mollia luteolâ pingit vaccinia calthâ."
Virgil Eclog. 2. ver. 48. Vide *Bod. in Theophr.*

"Caltham poetarum hanc esse volunt, quam aliqui, ab aureo colore floris, "chrysanthemum nominant, et quidem *Dioscoridis* l. 4. c. 58. At *Columna* "*Phyt.* (52.) clymenum *Dioscoridis* l. 4. c. 13. censet. Alii ad caltham *Plinii* "l. xxi. c. 6. Alii ad gomphœnam *ejusdem* l. 26. c. 7. referunt. *Dalecham-*"*pius* a cereo ipsius flore, Cerinthen putat." *B. P.* The flowers only are used; though the leaves are as medicinal, as also the flower cups, or herba florens.

SECT. II.

It is detergent, deobstruent, diaphoretic, and diuretic; called cordial and alexipharmic; and commended in obstructions of the viscera, green sickness, jaundice, scrophulæ, measles, small-pox, malignant fevers, pestilence, &c.

"Flores cardiaci censentur, hinc epatici. Calfaciunt et siccant 2. aperiunt, "discutiunt, subastringunt; menses cient, partum promovent (fumus subditus "parturienti) sudores movent, alexipharmaci censentur, ictero medentur. *Præp.* 1. Aqua, ex foliis et floribus, cum incipit florescere. 2. Acetum. 3. Con-"serva, ex floribus." *Schrod.* p. 553.—Observe

1. The petala or semiflosculi, and flosculi, are at first sweetish to the taste, then bitter and nauseous; the folia and calyces want the sweetness, but are more bitter, disagreeable, and acrid a little, making a lasting impression on the

tongue, (continuing an hour or ſo.) All the herb is of a ſtrong and ſomewhat reſinous, or rather bituminous, ſmell; and clammy to the touch. "Tota "planta tactu viſcida eſt." *Col. Phyt.* 58. "Flores odorati, folia guſtu her- "baceo, mox calidiuſculo . . . *Dodonæus* credit cor corroborare florem; folia "autem calidiora eſſe, acrimoniam enim fervidam quandam habere, ratione "cujus in olere ſumpta, alvum movere et lenire." *J. B.* l. c. "Tota planta "eſt tactu valde pinguis, ſaporis ſubamari, et odoris ſubaromatici, grati." *Nucl. Belg.* 54. "The leaves are fœtid, bitter, and redden a little the blue "paper: burnt at a candle they denote ſomewhat like nitre." *T. Hiſt.* p. 182. "Folia, guſtu herbaceo, mox calidiuſculo, odore gravi; flores cum gravitate "quadam, aliquantulum oderati." *Geoff.* iii. 243. "Salem eſſentialem con- "tinet nitroſo-ammoniacalem." *Ibid.* p. 244. — 2. Herbæ floridæ thea is of a very bitter and diſagreeable taſte, laſting an hour: it only dilutes ſyr. violarum, and ſol. heliotropii: but a ſolution of vitriol turns it opake, and to a greeniſh-black colour, which ſlowly and ſparingly precipitates. Florum thea is alſo bit- "ter and diſagreeable, with little ſmell, of the colour of old brandy. Ol. tartari makes it much deeper and ſtaining, but not urinous or fœtid: it gives a pale red to the ſolutio heliotropii; and precipitates more plentifully a ſolution of vitriol, than the former; in other reſpects they agree. Hence it is (ſubaſtringent and) ſaponaceous, as well as ſtimulating; and probably alſo cathartic. *Columna* ſays it loſes its taſte and ſmell by drying. An recte? But, 3. Pulvis foliorum is commended by *Cæſalpinus* for the tooth-ach; aqua ſtillat. for ſore eyes, by *Tragus*; the leaves for callous ulcers, and corns at *Paris*. *T. Hiſt.* p. 183. And, 4. It is much uſed as a cordial and alexipharmic; alſo as uterine. Not only the acetum calthinum, but alſo the juice and ſubſtance of the flowers, have been in great eſteem for the peſtilence; both as a preſervative and cure. A marigold-poſſet is much uſed to promote the eruption of the ſmall pox; "ejuſque uſus a longo tempore, fere inter omnes increbuit." *R. H.* "In metu carbunculi peſtiferi detur ſuccus calendulæ mane, ab ʒi. ad "ʒij. mirabiliter etiam purgat venenum peſtiferum, per ſudorem illud mira "virtute evocans." Ex obſ. *Marcelli Cumani*, *R. H.* "All the preparations of marigold are excellent for the jaundice, palſy, dropſy, ſmall-pox, malignant "fevers and green-ſickneſs. Children that are ſcrophulous are made to eat "the leaves and flowers in ſallads." *T. H.* p. 183. "In ſcrophulis flores et folia "cruda vel cocta comeſta, et decoctum pro potu ſolito commendantur." *Geoff.* iii. 244.

"Sanguis menſtruus muliercularum, præcipue benevalentium, odorem flo- "rum calendulæ ſpirat. Hinc conjicio, ſimilitudine quadam ſubſtantiæ, ca- "lendulam movere menſes." *River. Obſ. communicat. Petro Paſchequo Obſ.* 30. p. 557. Analyſi chymica, ex calendula multum extrahitur olei et humoris "acidi, parum vero ſalis volatilis, et ſpiritus urinoſi." *Geoff.* iii. 244. I fear it is an imagined analyſis. *Herman* gueſſes better when he conjoins the flores calendulæ et cheiri; as flores ſale fixo, cum paucis volatilibus conſtantes. *Cynos.* p. 599. though probably they contain more volatile parts than he imagines. "Flores odorem ſpirant aromaticum, ſi manduntur, acrimoniam penetran- "tem exerunt, et fere exurentem; hinc virtutes eorum ſudoriferæ ſummæ, vix cedentes croco." *Riegeri Introd.* Vol. II. p. 379.

SECT.

SECT. III.

It may be given in powder to ʒi. or ʒij. in infuſion to ʒß. The juice to ʒi. We keep no preparation of it. It is baniſhed the London *M. M.*

" The juice is given ab ʒi. ad ʒiv. The infuſion of the leaves and flowers " in white wine is taken from ʒiij. to ʒvi. the extract and conſerve from ʒi. " to ʒij." *T. Hiſt.* l. c. " Succus totius plantæ ab ʒi. and ʒiv. propinatur. " Infuſum florum et foliorum contuſorum in vino albo, ab ʒiij. ad ʒvi.; ex- " tractum a ʒi. ad ʒij.; conditum a ʒij. ad ʒi. præſcribuntur." *Geoff.* iii. 244. Would an ounce or two of the juice purge? " Conſerva florum calendulæ a " nonnullis tanquam ſpecificum vertiginis maxime commendatur. *River. Prax.* l. 1. c. 9. p. 181.

CAPPARIS. *Vide* Roots.

CARDUUS.

SECT. I.

Carduus, carduus benedictus. *Offic.* Cnicus ſylveſtris hirſutior; ſive carduus benedictus. *B. P.* 378. *T.* 450. Carduus benedictus. *Dod.* 737. *J. B.* iii. 75. 2. *Ger.* 1171. *Park. Par.* 530. *R. H.* 303. Carduus, luteus, procumbens ſudoriferus et amarus. *H. Ox.* iii. 160. Cnicus, caule diffuſo, foliis dentato-ſinuatis. *H. Cliff.* 394. Carduus, or the bleſſed-thiſtle.

It grows wild in Lemnos, Chio, &c. is annually ſown in gardens, and flowers in June. Quia a noſtris vulgo carduus benedictus apellatur, ſponte in agris " (Lemni inſulæ) naſcitur, nec aliqua cultura indiget: *Græci* nomine corrup- " to, gaideracantha, hoc eſt aſininam ſpinam nuncupant." *Bellon.* l. 1. c. 25. " p. 31. " Naſcitur etiam in arduis alpibus Gallo-provinciæ." *R. H. e Lob. Adv.* p. 373. " Ab immenſis viribus quas habere creditur, et hoc nomen ac- " cepit, et ſancti: imo ad Fridericum III. Imp. (who died an. 1493.) ex In- " dia miſſus fertur. (But *Arnoldus de villa nova* qui obiit 1363. uſed it.) Quod " ut non nego: ita compertum fuit poſtea, in Europa etiam ſpontaneum " eſſe. Locum oſtendit *Pena.*" *Hoffman.* p. 145. The herb and ſeeds are generally uſed; though the folia only are named in the *Pharmacop. Lond. Ed. noviſſ.*

" Carduus α κειρω, tondeo; vel ab antiquo verbo caro, quod aptus eſſet " carendæ, i. e. carminandæ lanæ κνικος, aut κμηκος, ἀπο τȣ κνιζειν, quod mor- " dere aut pungere ſignificat i vel ἀπο τȣ κνισμȣ, pruritu: an potius a floris " colore, cum κνηκος exponatur croceus, rutilus." *B. P.* It is not the κνηκος *Dioſcoridis* l. 4. c. 190. p. 320; and whether any of the cnici of *Theophraſtus*, is uncertain. It is the " Cnicus ſylveſtris alter *Theophraſti, Cord. in Dioſcor.*" *B. P.* And cnicus ſylveſtris alter et hirſutior *Theophraſti* according to *Hoffman.* l. c.

SECT II.

It is an antiſeptic, ſtimulating diaphoretic bitter, ſaid to be alexipharmic: and is recommended internally in intermitting and malignant fevers, head-achs, dropſies, worms; and outwardly for gangrenes, ulcers, &c. Cum ſerpentaria virginiana convenit.

" Herba cardiaca, alexipharmaca, ac ſudorifera eſt exuſitatiſſimis: calfacit et ſiccat 2. Attenuat, aperit, diſcutit, veneno et putredini reſiſtit; febres etiam in-
" veteratas, et quartanas curat. Laudatur a nonnullis peculiariter in cephalæa
" *clavo* dicta, ut et in ſurditate. Extrinſecus rarioris eſt uſus, adhibetur tamen
" nonnunquam ad gangrænam arcendam in (epithem: et cataplas:) Semen
" vires eaſdem obtinet, ſed uſu non æque crebro adhibetur: commendatur
" imprimis ad epar obſtructum. *Præp.* 1. Pulvis. Datur ad ʒi. 2. Aqua, ex
" herba integra. 3. Spiritus, ex herba fermentata. 4. Succus expreſſus.
" 5. Sal, ex cinere. 6. Oleum ſtillatitium. 7. Conſerva. 8. Syrupus, ex
" ſucco. 9. Extractum, ex foliis cum aceto diſtillato." *Schrod.* p. 556.

The herb is of a very bitter and diſagreeable taſte, and reſinous ſmell: the root is inſipid. " Inſigni amarore tota planta eſt prædita." *J. B.* " Tota
" planta amarore inſigni prædita eſt, radice excepta quæ nobis guſtantibus
" vix leviter amaricare videbatur." *R. H.* It loſes little by drying; and is infeſted by no inſect that I have obſerved.—2. It is much commended for gangrenes, foul ulcers, and even for cancers, outwardly. I wiſh theſe virtues were confirmed by experience. " Folia tuſa et impoſita ſcorpionum et ſerpentum
" ictibus medentur. Adverſus cancrum, aliaque maligna et putrida ulcera,
" vix aliud cardui benedicti foliis, ſucco, decocto aut aqua deſtillata eſt præ-
" ſtantius remedium; teſtantur nonnuli, mulierum quandam, cujus mammæ
" cancro ad coſtas uſque abſumptæ fuerant, aqua deſtillatâ, et pulvere foliorum
" inſperſo, mundatam et ſanatam fuiſſe ... Florum autem pappi vulneribus
" impoſiti ea ſine dolore ſanant: ex foliis cum muſto cataplaſma, tumores mox
" diſcutit pudendorum. Teſtatur *Arnoldus de villa nova* (c. 44. practicæ) vi-
" diſſe ſe quendam, cui ex putridis et cavis ulceribus eroſa fuerit ad oſſa uſ-
" que caro omnis tibiarum, quique bona omnia in curationem fruſtra expen-
" derit, hac tandem ratione ſanatum. Recentia c. benedicti folia contuſa,
" cum vino generoſo diſcoquebat, additaque poſtea liquefacta porci axungia,
" ebullire ſinebat, tandem injecte farina triticea, continuo ſpathulo agitabat,
" quoad omnia in emplaſtri conſiſtentiam coaleſcerent, quod calidum bis quo-
" tidie ulceribus imponebat." *J. B.* iii. 79.—3. Inwardly a ſtrong infuſion or decoction of it, is emetic: being more nauſeouſly bitter, though not ſo intenſely bitter as wormwood: hence it is, ut ſerpentaria, more diaphoretic than ſtomachic. It is commended alſo for vertigoes, deafneſs, rheums, epilepſy, palpitatio cordis, ſciatica, ſcurvy, colics, poiſons, peſtilence, &c. Vide *J. B.* " Pleu-
" riticis opitulatur ſtatim initio, una aut altera præmiſſa V. S. ... conducit quo-
" que ad ſanguinem grumoſum diſſolvendum, præſertim in caſu ablato...
" ſemen in emulſionibus cum aqua papav. rhæados paratis, adverſus pleuriti-
" dem, et rheumatiſmum ſæpe felici cum ſucceſſu uſurpatur. Sudorem enim
" copioſe prolicit. Eadem emulſio in variolis et morbillis, aliiſque morbis
mali

" mali moris utiliter preſcribitur: exanthematum enim eruptionem faciliorem efficit et feliciorem. *Geoff.* iii. 259. *Delirant medici*; *plectuntur* .... &c. ——

" Analyſi chymica, ex foliorum et ſummitatum card. bened. ℔v. prodierunt " humoris (odoris et ſaporis herbacei, obſcure ſalſi, obſcure acidi ℔iß. humoris " ſubacidi, deinde auſteri ℔ij. ʒxiv. gr. lvii. humoris ſale vol. urinoſo copioſo " impregnati ʒvijß.) ℔ivß. ʒvii. gr. xxi. ſalis vol. urin. gr. xv. olei ʒvii. gr. " xii. Carbonis ʒiv. gr. xlviii. unde cinerum ʒij. et inde ſalis fixi alcali ʒv. gr. " xv. (ergo terræ ʒx. gr. lvii.) Jactura fuit ʒij. gr. li." Secundum *Geoff.* iii. 258. He adds, " Salem eſſentialem continet tartareo-ammoniacalem, cum " pauco oleo admiſto." Although we have here very little acid.

SECT. III.

It may be given in ſubſtance to ʒi. In infuſion or decoction to ʒij: the ſeed in emulſion to ʒij. without vomiting; though this is brought on by large quantities. We have no preparation of it. The ſeed is uſed in the tinctura ad ſtomachicos.

" Succus ad ʒiij. iv^{ve}. exhibetur: decoctum ad ʒvi. ſæpius die iteratum; " pulvis ad ʒi. extractum ad ℈i. vel ʒß. *Ballonius* l. 2. conſil. 2. obſervat de- " coctum cardui bened. ad ʒiij. vel ʒiv. aſſumptum, urinam reddere craſſum " et fetidum." *Geoff.* iii. 259.

LECTURE LV.

CARYOPHYLLUS.

SECT. I.

CAryophyllus hortenſis, caryophyllus tunica. *Offic.* Caryophylla rubra. *Ph. Lond.* p. 7. Caryophyllus altilis major. *B. P.* 207. *T.* 330. *H. Ox.* ii. 561. C. hortenſus, *Park. Par.* 306. *R. H.* 286. C. multiplex. *Ger.* 588. Betonica coronaria, ſive callyophyllus major, flore vario. *J. B.* iii 327. Dianthus, floribus ſolitariis; ſquamis calycynis ſubovatis, breviſſimis, corollis crenatis. *H. Cliff.* 164. Clove July-flower.

The clove-July-flower is certainly a variety, raiſed from ſeed; as there are many others every year, and often as double, and of the ſame colour, but ſeldom ſo odoriferous; and ſo it is propagated commonly by ſlips or layers. From what natural ſpecies it came originally, is uncertain, as is that of all the carnations. " Utuntur in officinis noſtris caryophyllo hortenſi quam odoretiſſi- " mo." *Hoffman.* p. 151. The flowers or petala only are uſed.

" Ut nomen traxiſſe ab odoris affinitate qualicunque dubium non eſt: ita " neſcio ſane, quæ et unde ſit barbara illa vox tunica. *Scaliger* in *Africam*, " et quidem *Tunetum* uſque navigat. *Ego cum Cæſ. ero*, qui truncam eſſe vo-

" cem

" cem putat ἀπὸ τῆς betonica." Vide *Hoffman.* p. 151. " Hunc alii canbri-
" cam *Plinii* l. 25. c. 8. esse volunt. Aliis est vetonica, sive betonica altera,
" inter nothas *Dioscoridis*; nec forte inepte. Aliis herba tunica; quibusdam
" iphium *Theoph.* 6. hist. 2. and 7. hist. 12. sed male . . . Forte *Theoph.* 6. hist.
" 1. and 6. per Jovis florem (whence *Linnæus*'s dianthus) inter coronarios fru-
" ticis minutis foliis conditum, cujus flos sine odore tantum in coronarum usu,
" sylvestrem caryophyllæam intellexit. Armerii flores dicuntur, a gallico no-
" mine armoires & armoiries." *B. P.* " Veteribus incognitum fuisse credo."
R. H. Vide *Bod. in Theophr.* p. 669.

SECT II.

These are attenuant, subastringent, and agreeably aromatic; called cephalic and cordial; and are recommended in vertigoes, apoplexies, epilepsies, palpitation of the heart, faintings, lowness of spirits, and other diseases of the head and nerves.

" Moderate calfaciunt, et siccant. Cephalici sunt ac cordiales. *Usus præ-*
" *cip.* in vertigine, apoplexia, epilepsia, aliisque capitis et nervorum affectibus;
" in syncope ac palpitatione cordis. Fugant lumbricos: alleviant partum.
" Extrinsecus adhibentur in vulneribus capitis; extrahunt ossa cranii fissa, le-
" niunt cephalalgiam et odontalgiam. *Præpar.* 1. Succus inspissatus essentia
" dictus. Dosis a ℈ß. ad ʒß. 2. Conserva. 3. Aqua stillat. ophthalmica insig-
" nis est, &c. 4. Syrupus. 5. Acetum, ex infusione florum." *Schrod.* 557.

1. They are of a sweetish taste at first, then bitterish, and subastringent; and of a pleasant aromatic clove smell. This aromatic spirit is very volatile, flies off in drying or decocting: it is even lost in only bruising the flowers. Hence, says *Hoffman*, " Quemadmodum in rosa, odor et sapor in superficie est,
" peritque in sicca, ita in flore nostro." p. 151. And its cordial and cephalic virtues, depending chiefly on this, are to be found more in its infusion, or simple water, than in succo inspissato, or decoction. Yet 2. The decoction is diluent, antiseptic, and vulnerary; and may be a good drink in acute and malignant fevers, &c. though the infusion, more theæ, is better. " Innumeros,
" Deo benedicente, solo decocto florum caryophyllorum vindicavi a febribus
" malignis; et hoc omnibus medicinæ studiosis jurato veluti affirmo, vel poten-
" ter sudores movent, vel urinas pellunt, citra magnos naturæ motus, simulque
" cor corroborant, sitimque sedant." *Sim. Paul. Quad. Bot.* p. 242. *R. H* ——
3. They are commended also in palsies, weakness of the stomach, cardialgia, malignant and pestilential diseases, &c. They give an agreeable colour and flavour to vinegar. " Usus obtinuit in lipothymia, palpitatione cordis, &c. in
" febribus pestilentialibus dato, vel succo expresso totius herbæ ad ℥iij. vel
" pulvere radicis ad ʒiij. Eodem tempore nares contingere oportet aceto caryo-
" phyllato, gestare linteola eodem madefacta. Idem fit in epilepticis, in metu
" convulsionum, præcipue in vulneribus partium nervosarum. In parturienti-
" bus etiam magni fit." *Hoffman* p. 152. " Tempore pestilentiæ ad contagium
" gium arcendum, lintea aceto caryophyllato madefacta gestanda et identidem
" olfacienda sunt, nec non illius aceti Cochlear unum aut alterum, mane utili-
" ter assumitur ad contagium precavendum." *Geoff.* iii. 270.

" Ex

" Ex his floribus ſyrupus, conditum, acetum, in officinis præparata ſervan-
" tur, & aqua diſtillatur odorata. Syrupus in julapiis ac potionibus cardiacis
" frequenter uſupatur ad ʒi. vel ʒij; conditum ab ʒß. ad ʒiß. in electuariis ce-
" phalicis, cardiacis, et antiſpaſmodicis. Aqua diſtillata ad ſudores prolicien-
" dos, aut exanthematum eruptionem promovendam utilis cenſetur." *Geoff.* iii. 269. We make little uſe of them any way, except in ſyrup.

" Analyſi chymica, florum a calycibus ſeparatorum ℔v. præbuerunt humoris
" ℔iv. ʒij. ʒi. gr. xviii. olei ʒij. ʒiij. gr. liv. Carbonis ʒvß. gr. xlviii. unde
" cinerum ʒj. ʒviiß. ac inde ſalis fixi alcali ʒvß. (ergo terræ ʒx.) et jactura
" fuit ʒiv. ʒvi. gr. xxiv." Secundum *Geoff.* iii. 268.

CENTAURIUM.

SECT. I.

Centaurium. Centaurium minus. *offic.* Centaurium minus. *B. P.* 278. *T.* 122. *Dod.* 339. *R. H.* 1092. *Syn.* 286. C. minus, flore purpureo. *J. B.* iii. 353. C. minus, rubrum. *H. Ox.* ii. 566. C. parvum. *Ger.* 547. C. minus, vulgare. *Park.* 272. Gentiana, foliis lineari-lanceolatis, caule dichotomo; corollis infundibuli formibus, quinque-fidis. *H. Cliff.* 81. The leſſer or common centaury.

It grows in dry paſture grounds, here and almoſt in every country; flowering in June and July. It hates culture. " Hortenſe ſolum reſpuit, nec hortis
" quamcunque adhibueris curam aſſueſcit." *Bod. in Theophr.* p. 87. " Illud
" experientia didici, centaurium in hortis tranſlatum, eodem perire anno, nec
" unquam e ſemine renaſci." *Ibid.* p. 1045. " Verum in horto noſtro ſemel
" ſuccrevit ex ſemine, viguit, floruit, and ſemen perfecit." *R. H.* 1092. Uſe the flowering tops. Herba cum floribus. *Dale* 189. Herba. *Phar. Edinb.* Summitates *Ph. Lond.*

It has its name κενταυριον, or κενταυρειον from *Chiron* the *centaur*. " Cen-
" taurea curatus dicitur *Chiron*, cum *Herculis* excepti hoſpitio pertractandi arma
" ſagitta excidiſſet in pedem: quare aliqui Chironion vocant." *Plin.* l. 25. c. 6. p. 635. But whether this is any of the three centaureæ *Plinii*; or the κενταυριον το μικρον *Dioſcoridis*, may well be doubted. " Centaurium parvum quod
" aliqui *Limnæum* vocant, quod humecta amet loca, herba eſt hyperico, aut
" origano ſimilis; cujus caulis dodrante altior eſt et anguloſus: flores ad
" lychnidis florum ſimilitudinem e puniceo colore in purpuram vergunt: folia
" minuta, quadantenus longiora, veluti rutæ: ſemen tritico ſimile; radix pu-
" ſilla, lævis et ſupervacua." *Dioſcorides* l. 3. c. 9. p. 175.

SECT. II.

It agrees in virtues with gentian; and is recommended internally in weakneſs of the ſtomach, jaundice, obſtructio menſium, green ſickneſs, worms, agues, gout, ſcurvy, bites of mad dogs, &c. and outwardly for ſwellings, &c. in fotu.

" Spleneticum eſt et epaticum, calfacit et ſiccat, amarum eſt citra morda-
" citatem, unde et leniter aſtringens, extergens, aperiens, vulnerarium: biliosos
" pituitoſos humores quam leniſſime per alvum educit; ſerum per poros diſcu-
" tit. Hinc utile in febribus (unde et nomen febrifugæ habet) ictero, men-
" ſibus ſuppreſſis, ſcorbuto, arthritide, lumbricis, et ſpecifice in morſu canis
" rabidi. *N. B.* Tantæ æſtimationis eſt ut vix vinum medicatum ſeu abſin-
" thites vulgus parat, cujus partem non conſtituat. *Præpar.* 1. Aqua, ex
" integra planta. 2. Extractum, *i. e.* ſuccus inſpiſſatus; cujus doſis ad ʒi.
" 3. Sal com. ex cinere." *Schrod.* p. 559.

It is of an intenſely bitter taſte, but of little or no ſmell. " The leaves and
" flowers are of an intolerable bitterneſs, (*ſont d'une amertume inſupportable*), yet
" redden conſiderably the blue paper; whence we may conjecture, that the
" ſalt of this plant is not very different from the natural ſalt of the earth,
" which is very bitter, but mixed with a conſiderable portion of ſulphur and
" earth." Vide *T. Hiſt.* p. 68. —2. In decoction it is ſaid to be coſmetic, and to
" kill lice. " Decoctum lentigines, varos, alphos, et ceteras cutis infectiones
" exterit... Illo ſi lavetur caput, inſigniter furfures et ſcabiem detergit, imo
" una myriades pediculorum enecat." *R. H.* & ibi citatos. And in clyſters
it is ſaid to cure the ſciatica, a *Fernelio*. *Ibid.* — 3. The centaurium parvum
Dioſcor. was cathartic: *Dodonæus* denies ours that quality. *C. Hoffman* ſays, p.
156. it purges ſi debita quantitas detur. Mr. *Ray* leaves the controverſy to be
determined by experience. I know no ſtrong bitter but what purges if taken
in a large doſe. Before the cortex was known, centaury was one of the moſt
famous febrifuga. It is commended alſo for malignant fevers; to make the
hæmorrhoids run, &c. There is a book *De Virtute Centaureæ* attributed to
Galen, conſiſting of three pages. Vide *Spur. Librorum* p. 97. B. " In quo *Simon*
" *Pauli* duo obſervavit notatu digna; primum ſcil. authorem extracta confi-
" ciendi modum non ignoraviſſe; alterum quod ingens præſidium collocet in
" hac planta tanquam ſpecifica in curandis canis rabidi aliorumque venenato-
" rum animalium morſibus." *Geoff.* iii. p. 277. But if he had looked into
Dioſcorides, on this plant, he might have ſeen that extracts were made in his
day; ſo long before this trifling author; who yet, at the ſame time, lays more
ſtreſs on ſcarification than on centaureæ ſuccus in this diſeaſe. " Herba ſe-
" mine prægnans collecta, et diebus quinque aqua macerata, dein coquitur
" dum aquæ ſuperemmeat: mox ubi refrixit exprimitur, et per linteolum ex-
" colatur. Expreſſum iterum coquitur, uſque dum mellis ſpiſſitudinem aſciſ-
" cat." *Dioſcor.* l. c. As for *Palmerius* his *pulvis contra rabiem*, a hotch-potch
of a dozen ingredients, I think it much inferior to the centaureæ ſuccus: but
I doubt if either ever cured one of this diſeaſe. You have it at large in
Geoff. iii. 278.

" Analyſi chymica, ex plantæ floridæ ℔v. demptis radicibus prodierunt hu-
" moris ℔iij. ʒix. ʒiij. gr. xxvii. (of which the firſt ʒxiij. were ſaporis acris lin-
" guam pungentis ſubacidi, olei ſpiſſi. ʒxiij. gr. vi. carbonis ʒviij. unde cine-
" rum ʒxi. gr. liv. ac inde ſalis fixi alcali ʒiij. gr. xl. (ergo terræ ʒi, gr. xiv.)
" et jactura fuit ʒxij, ʒvii. gr. xxxix. (ſum. ℔v.)" Secundum *Geoff.* iii. 276.
Who adds, " Folia et flores inſigni amarore donantur, chartam cæruleam in-
" tenſo rubore tingunt: ſalem eſſentialem continere videntur tartaro vitriolato
" haud abſimilem, cum ammoniacali conſociatum, et multo oleo acri et craſſo

" conjunctum." And so *T.* gives one salt, and *Geoff.* another: and both conjecture to no purpose.

SECT. III.

It may be given in substance to ʒi.; in infusion or decoction to ʒij.: the extract to ʒß. It is an ingredient in the tinctura ad stomachicos, infusum amarum utrumque, and the theriaca *Andromachi.* The essential salt of this plant, or of any other, is seldom made.

" Pulvis earundem exsiccatarum ad ʒi. præscribitur, et conditum ad ʒß. " Sal ex ejus cineribus ad ʒß. exhibetur." *Geoff.* iii. 277. 279.

CHAMÆDRYS.

SECT. I.

Chamædrys, trissago, quercula calamandrina. *Offic.* Chamædrys minor repens. *B. P.* 248. *T.* 205. *H. Ox.* iii. 422. C. repens minor. *Dod.* 43. C. *vulgo* vera existimata. *J. B.* iii. 288. C. minor. *Ger.* 656. C. vulgaris. *Park.* 104. *R. H.* 527. Teucrium, foliis ovatis, inciso-crenatis, petiolatis; floribus laxe verticillatis. *H. Cliff.* 302. Common germander, or English treacle.

It grows in Germany (viz. *Austria*) France, Italy, &c. Though found often wild, yet Mr. *Ray* doubts of its being a native of England. In gardens it flowers in June and July. The herb, or leaves and tops are used. Chamædrys major repens, *B. P.* is but a variety, differing only in magnitude.

Chamædrys, humilis quercus, a foliorum forma.

" Chamædrys, *quibusdam* Chamædρωψ, *aliis* linodrys dicitur. Sunt et qui " eam teucrium appellaverunt, quod cum teucrio quandam servet similitu- " dinem. Nascitur in asperis et petrosis locis. Est vero frutex exiguus, do- " drantalis, folia habens exigua, effigie et divisura quercus, amara: florem pene " purpureum, ac pusillum. Carpi ipsam semine prægnantem oportet." *Dioscorides* l. 3. c. 112. p. 220. " Chamædrys herba est quæ Latine trissago (a- " liis trixago dicitur. Aliqui eam Chamædropen, alii teucrion appellavere. Fo- " lia habet magnitudine mentæ, colore et divisura quercus. Alii serratam, et ab " ea serram inventam esse dixere; flore pene purpureo. Carpitur prægnans in " petrosis." *Plin.* l. 24. c. 15. p. 621.—2. Scordium. *Offic.* Scordium. *B. P.* 247. *Dod.* 126. *J. B.* iii. 292. *Ger.* 661. *R. H.* 576. *Syn.* 246. S. legitimum. *Park.* 110. Chamædrys palustris, allium redolens. *H. Ox.* iii. 423. C. palustris canescens; seu scordium *officinarum.* *T.* 205. Teucrium, foliis ovato lanceolatis, serratis, sessilibus; floribus sæpius binis. *H. Cliff.* 302. Water germander.

It grows in the marshy places in the *isle of Ely*, in great plenty; also in France, &c. flowering in July." " In palustribus *Elienses* insulæ copiose pro- " venit." *R. Syn.* 246. Scordion from σκορδον; allium ob odorem alliaceum; by which, after it had been long unknown, it was again discovered by *William*

Peliſſier, *Biſhop* of *Montpelier*, and *William Rondelet*, (qui obiit 1566.) *Profeſſor* of *Medicine* there, in the adjacent maritime places. Vide *Lob. Adv.* p. 220.

" Scordium in montanis et paluſtribus locis naſcitur. Folia habet triſſa-
" ginis ſimilitudine, at majora, neque ita per ambitum inciſuris diviſa, aliquan-
" tum vero allium redolentia, aſtringentia et guſtu amara; cauliculos autem
" quadrangulos, e quibus flos ſubruber emicat." *Dioſcor.* l. 3. c. 125. p. 225. Hence theſe two plants are probably the chamædrys and ſcordium of the ancients.

SECT. II.

Germander is attenuating, antiſeptic, diaphoretic, and diuretic; called alexipharmic, hepatic, ſplenic, and uterine: and is recommended internally in obſtructions of the viſcera, ſcurvy, gout, internal ulcers, dropſy, &c. and externally for tumors, inflammations, gangrenes, &c.

Scordium differs little in qualities from the germander; but is reckoned a more powerful antiſeptic and alexipharmic; and ſo is more uſed in malignant and peſtilential diſeaſes inwardly, and in gangrenes and mortifications outwardly.

" Chamædrys calfacit et ſiccat 2. Eſt ſplenetica et epatica, ſaporis amari;
" incidit, attenuat, aperit, potenter urinam et ſudorem movet. Hinc confert
" in febribus, ſcorbuto, ſanguine coagulato, hydrope incipiente, menſibus ob-
" ſtructis; ac inprimis in arthritide. Extrinſecus in ulceribus ſerpentibus, in
" ſcabie ac pruritu, in catarrhis exſiccandis. *Præp.* 1. Aqua ex foliis et floribus.
" 2. Conſerva ex floribus." *Schrod.* p. 561.

" Scordium calfacit et ſiccat 2. abſtergit, attenuat, incidit, putredini reſiſ-
" tit, alexipharmacum ac ſudoriferum eſt. *Uſus præcip.* in peſte, peſtilentiali-
" buſque morbis, febribus malignis (tam preſervando quam curando) in ob-
" ſtruct. epatis ac lienis, in pulmonibus purulentis, ac mucilagine refertis. Ex-
" trinſecus mundificat vulnera ac ulcera, lenit dolores podagricos. *N. B.* Sunt
" qui in menſium profluvio cum ſucceſſu exhiberi volunt. *Præp.* 1. Aqua
" ſtillat. 2. Succus inſpiſſatus. 3. Syrupus ex ſucco. 4. Syr. compoſ. 5.
" Conſerva ex foliis. 6. Electuarium diaſcordium *Fracaſtorii*. Doſis a ʒi. ad ʒij.
" 7. Sal ex cinere." *Schrod.* p. 678.

Germander 1. Is of a bitter, and ſomewhat aromatic taſte, and pretty agreeable, but not very fragrant ſmell. " Sunt folia ſaporis ſubamari, ſubdulcis
" et aromatici." *J. B.* " The leaves are bitter and aromatic; they do not
" redden the blue paper; which ſhews they contain principles different from
" thoſe of the leſſer centory." *T. Hiſt.* p. 69. " Odoris eſt aromatici, ſapo-
" ris valde amari." *Nucl. Belg.* 74.—2. Germander tea is very bitter but ſcarcely aromatic: it made the ſyrup violarum a little greeniſh; and gave a ruby colour to the ſolution of turnſole: a ſolution of vitriol turn'd it firſt green; then black and opake, it precipitating ſlowly. The tea was of a pale brandy colour, but a few drops of ol. tartari made it very yellow and dying, and precipitated a whitiſh ſediment in a ſmall quantity. When it had ſtood ſome time it became much darker on the top, or brown and opake, which colour gradually deſcended, and in a day or ſo it was all alike to the bottom of the glaſs.

This is a common effect of the ol. tartari, (and also of aqua calcis, in a lower degree) upon almost every such infusion; while therefore it increases the tincture, it diminishes its strength, and the virtues it had drawn from the simple; to say nothing of its altering its nature, in many instances.—3. Externally it is discutient, detergent, and anodyne like other aromatic and subastringent bitters, serviceable in pains, tumors, ulcers, &c. "Extrinsecus adhibetur in ulce-" ribus serpentibus, in dolore hæmorrhoidum, in auribus vermiculosis, in sca-" bie et pruritu, in catarrhis exsiccandis." *R. H.* And,—4. Inwardly it is recommended also in intermitting and malignant fevers, pestilence, king's-evil, jaundice, mensibus obstructis, gravel, consumption, worms, &c. Vide *R. H.* Whence Mr. *Geoffroy* has transcribed almost all he has to purpose on the virtues of this plant. He names him twice, but takes much more from him than he owns. "Scribit *Vesalius* in *Epist. de China*, decoctum chamædryos " fuisse commendatum a *medicis Genuensibus Carolo* V. *Imp.* pro perpetuo poda-" græ exilio, (auxilio *R. H.* & *Geoff.*) facto decocto sive ex vino sive ex aqua " stillatitia. Experiatur qui volet." *Hoffman* p. 162: who with *Tragus* thinks germander and betony of the same nature. The *Prince* of *Mirandola*'s powder, thought a specific for the gout and sciatica, is this: ℞ Chamæd. chamæpit. cent. minoris, rad. centaur. maj. Arist. rot. & gentianæ āā p. æ. Vide *T. Hist.* p. 69. "Pulvis chamædryos celebratur inter *Ægyptios* contra febres " intermittentes. *Alp. Med. Æg.* fol. 146, 147. They use the decoction of it also. "Planta ipsa in agro *Cantabrigiensi* a vulgo Englisch treacle dicitur, " procul dubio quia alexipharmaca censetur." *R. H.*

Scordium also is bitter and aromatic, and smells something like garlick, but neither so strongly nor disagreeably. "Folia . . . odore allii sed remissiore et " gratiore, sapore amaro." *J. B.* "Odoris et saporis est alliacei amari." *Nucl. Belg.* p. 265. "Scordium is bitter, aromatic, and reddens a little the " blue paper. It contains a sal volatile oleosum, whereof the sal ammoniac is " not entirely decomposé, but involved in much sulphur." *T. Hist.* p. 415. Scordium tea has much the same taste with germander tea as to bitterness, but differs a little in the flavour; it acts the same way on syr. violarum, et solutio heliotropii; but does not altogether blacken so much the solutio vitrioli, tho' it precipitates it more fully. It is a species of the same genus, and does not a little resemble it facie externa. And much the same effects and virtues are attributed to both. Vide *Dioscor.* ll. cc. Yet scordium, ever since Galen's time, has been preferred as an antiseptic and alexipharmic, though the reason seems not to be very strong. "Literarum monumentis traditum est a quibus-" dam celebribus viris, cum in prælio interemptorum cadavera multos dies in-" sepulta jacuissent, quæcunque supra scordium forte fortuna ceciderant, mul-" to minus aliis computruisse, ea præsertim ex parte, qua herbam attigerant. " Ob quam rem sane persuasum est, omnibus tam reptilium venenis, quam " noxiis medicaminibus, quæ corpus putrescere faciunt, scordium adversari." *Galen de Antidotis* l. 1. c. 12. p. 105. E. "*Ægineta Galeni* verbis conformia " recitat. *Matthiolus* vermes necare scribit. *J. B.*

" Ex chamædyos floridæ recentis ℔iv. ℥x. per retortam distillatis prodierunt humoris ℔iij. ℥vij. ʒvi. gr. lxvi. olei ℥ij. ʒi. gr. xxiv. carbonis ʒx. gr. xviii. " unde cinerum ℥ij. ʒiß. ac inde salis fixi alcali ʒiv. gr. liv. (ergo terræ ℥iß. " gr. liv.) et jactura fuit ℥iv. ʒvijß." Secundum *Geoff.* iii. 297. "Folia amara

" ſunt et ſubaromatica. Chartæ cæruleæ colorem nullo modo mutant. " Salem eſſentialem continere videntur ſali mirabili Glauberi ſimilem, cum " ammoniacali conjunctum, et multo oleo aromatico involutum." *Ibid.*—*N. B.* According to his analyſis, humoris prima portio ʒxij. was ſubacida; the 2d manifeſte acida ʒ37½. and the 3d of 6 ounces and 48 grains intenſe acida, deinde tum acida, tum alcali, et ſale volatili urinoſo imprægnata: and yet the leaves do not redden the blue paper. How he finds Glauber's ſalt here I know not.

SECT. III.

They may be given in ſubſtance to ʒi. or more if not too bulky, in infuſion or decoction to ʒß. The ſcordium is an ingredient in the aqua alexiteria, aqua epidemia, aqua theriacalis, decoctum diaſcordii, electuarium antidyſentericum, diaſcordium, mithridatium, theriaca: but the chamædrys in the theriaca only. " Chamædryos pulvis ad ʒi. exhibetur. Extractum in officinis conficitur; ex- " hibetur ad ʒi." *Geoff.* 3. p. 298.

Hieronymus Fracaſtorius, phyſician to *Pope Paul* III. who died in 1553. æt. 70. is the author of the Diaſcordium; and deſcribes it de contagionibus et contagioſis morbis, et eorum curatione, lib. iii. cap. 7. " Et in peſte correptis, ac extreme " deſperatis commendat hoc modo. ℞ Succi lujulæ ʒij. ſucci citri ʒi. dia- " ſcordii ʒi. ſpecierum cordialium e gemmis ϑij. aceti ʒi. omnia miſceto et " totum haurito." *Ph. Aug.* p. 267. There is opii gr. i. in our diaſcordii ϑvij.

CHAMEMÆLUM.

SECT. I.

Chamæmelum. *Offic.* Chamæmelum nobile, ſive leucanthemum odoratius. *B. P.* 135. *T.* 494. Chamæmelum odoratum. *Dod.* 260. C. odoratiſſimum repens. *J. B.* iii. 118. *R. H.* 353. *Syn.* 185. *H. Ox.* iii. 35. Chamæmelum. *Ger.* 755. quod deſcrib. *Park. Par.* 289. C. Romanum. *Tab. Ic.* 19. Anthemis, foliis pinnato-decompoſitis, laciniis ſetaceis. *H. Cliff.* 415. Common camomile.

It grows in great plenty on heaths and commons in *England*, in many places. " In *Cornwall* ſo plentifully that you may ſcent it all along as you ride . . . : Supra *Londinum* ſponte exit in planitie Richmondiana et Branfordiana, " omniumque copioſiſſime in Hounſleiana. *R. Syn.* 185. It flowers in June, July, &c. The herb and flowers are uſed. Folia, flores. *Ph. Lond.* And of this ſort only; although in foreign countries the chamæmelum, chamomilla, or camomilla, *offic.* be the chamæmelum vulgare, leucanthemum *Dioſcoridis. B. P.* 135. " Chamomilla eſt 1. Vulgaris; hæc uſitatiſſima. 2. Romana " ſeu nobilis odorata. Hæc itidem uſualis. 3. Fœtida, hæc minus uſualis. " 4. Inodorata. Itidem minus uſualis." *Schrod.* 562.

" Anthemidem, alii leucanthemon, alii eranthemon, quoniam vere floreat, " alii chamæmelum, quoniam odorem mali habeat, nonnulli melanthemon,

alii

" alii chyroſomen, allii denique calliam vocant. Hujus genera tria, flore " tantum diſtantia: rami dodrantales, fruticoſi, alis multis concavi: foliola " parva, tenuia, numeroſa: rotunda item capitula, intus quidem auri colore " fulgentia, foris vero orbiculato ambitu floribus circundata candidis, aut me- " linis, aut purpureis, magnitudine foliorum rutæ. Naſcitur in aſperis et " juxta ſemitas. Colligitur vere." *Dioſcor.* l. 3. c. 154. p. 23—5.

SECT. II.

It is attenuant, deobſtruent, diuretic, and carminative; called ſtomachic and uterine, and is recommended internally in obſtructions of the viſcera, flatulent and nephritic colics, want of appetite, indigeſtion, agues, &c. and outwardly as emollient and anodyne, for inflammations, pains, contuſions, tumors, &c.

" Calfacit et ſiccat, 1. Digerit, laxat, mollit, mitigat dolorem, menſes et " urinam ciet. Eapropter uſus inſignis eſt, in dolore colico, et hinc pediſſe- " qua pareſi. Extrinſecus uſitatiſſimus ejus uſus eſt, in paregoricis, emollien- " tibus, maturantibus cataplaſmatis, clyſteribus, &c. *Præpar.* 1. Aqua ex vul- " gari. 2. Aqua ex Romana. 3. Aqua carminativa, ſeu compoſita. 4. Oleum " ſtillat. ex vulgari. N. deſtillant alii cum terebinthina, unde oleum cæruleum. " 5. Oleum ſtillat. ex Romana. 6. Oleum infuſum ex vulgari. 7. Sal com. " ex cinere. 8. Syr. de ſucco camomillæ." *Schrod.* 562.

1. It is of a very bitter taſte, and fragrant (as it were acidulous) ſmell, reſembling that of ſome apples, or quinces rather. " Folia amabili odore præ- " dita." *J. B.* " Odorem ſpirat ſuavem unguenti." *R. H.* " Chamomilla " vulgaris ſaporis eſt valde amari et calidi, odoris aromatici. Romana odo- " ris et ſaporis fortioris, et magis grati." *Nucl. Belg.* 75. " The leaves and " flowers have a ſtrong, not unpleaſant ſcent, and a very bitter taſte." *Miller Bot.* 130. " Referunt folia et flores pergratum ac jucundum cum gravitate " quadam odorem aromaticum. In hortis colitur." *Geoff.* iii. 300.—2. Herbæ floridæ thea is of a beautiful tranſparent orange colour, very bitter, and ſmells like the plant; but not in the leaſt viſcid. It only dilutes ſyr. violarum et ſolutio heliotropii: ol. tartari does not make it fetid. Solutio vitrioli makes it turbid, and of a browniſh black; and with it precipitates plentifully, becoming tranſparent, but brown ſtill above. Spirit of vitriol diſſolves this ſediment, but the brown colour remains, and a dark gray mucus is again precipitated.—3. It is much uſed externally in baths, fomentations, cataplaſms, clyſters, as emollient, diſcutient, and anodyne; for tumors, inflammations, pains, &c. as for durities mammarum a lacte coagulato; (*R. H.*) colic pains, obſtructions of urine, &c.—4. Internally it dilutes, diſſolves, and gently ſtimulates; and is one of the ſafeſt, and leaſt heating ſtrong bitters; and commended in the cardialgia, jaundice, hyſteric fits, king's-evil, intermitting fevers, dropſy, &c. " Nonnulli iis (leucanthemo et chryſanthemo) in farinam tritis cum oleo u- " tuntur ad illitiones, idque ad febres periodicas abigendas." *Dioſcor.* l. c. " Chamæmelum ... Febres, quæ citra viſceris alicujus inflammationem infeſ- " tant, ſolvit: ac præſertim quæ ex humoribus bilioſis, aut cutis denſitate " proveniunt. Qua de re ab Ægyptiorum ſapientiſſimis ſoli conſecratum eſſe,

" febriumque omnium putatur remedium." *Galen Simpl.* l. 3. c. 10. p. 18. H. And in that country the flores camomillæ are uſed ſtill in their febrifugal epithemata. *Alp. M. Æg.* l. 4. c. 15. p. 146. 2. " Succi chamæmeli " expreſſi cochl. ij. vel. iij. cum guttulis aliquot ſpiritus vitrioli, in juſculo ex- " hibita, in febre quacunque intermittente, paulo ante acceſſum, inſtantem pa- " roxyſmum plerumque avertunt, et febrem ipſam curant." *R. H.* Dr. *Eli-* " *ſha Coyſh* often found florum pulvis, in ſufficient quantity, as effectual in agues as the bark itſelf. Vide *Morton de Feb.* c. 6. p. 43 and 44. Where he alſo gives the three inſtances in which only the cortex ever failed him in agues, and which he cured however by an arcanum of his own in the ſpace of two days. This arcanum he does not conceal, but gives it thus. " ℞ Florum " chamæmeli, ſubtiliſſime pulveriſat. (plus minus pro ætate) ℈i. antimonii " diaphoret. ſalis abſinthii ana ℈ß. M. F. Pulvis ſumendus in hauſtu poſſetalæ, " vel cujuſcunque julapii temperati; aut in formam boli, cum ſyrupo caryo- " phyllorum; vel in formam pilularum cum mucilagine gum. tragacanthi re- " dactus; ſexta quaque hora per biduum aut triduum repetendus." *N. B. Here no aſtringency is mentioned.* " Dr. *Strachey* M. D. hujus herbæ decoctum, " felici ſucceſſu ad ſcrophulas propinare ſolet." *R. H. Mr. Geoffroy*'s analyſis I reckon an imaginary one. iii. p. 300.

SECT. III.

It may be given in powder to ʒi. and this repeated ſeveral times in a day; in infuſion to ʒij. or ʒß. The preparations are aqua ſimplex, oleum ſtillatitium or eſſentiale, et oleum chamæmelinum, all from the flowers; but the herb will do as well. The flowers are much uſed by way of tea. They are uſed in the tinctura ad ſtomachicos, decoctum commune pro clyſtere, decoctum emolliens pro fotu, cataplaſma diſcutiens, and the oleum chamæmeli (for chamæmelinum) in the cataplaſma ſuppurans.

" Oleum chamæmelinum duplex in officinis deprehenditur, ſcilicet vulga- " tiſſimum, quod per infuſionem, alterum elegantiſſimum, quod, per veſicam " arte chymica paratur, coloris cærulei elegantia et amœnitate ipſi ſapphiro " non cedens. Primum tumores duros emollit . . . Poſterius oleum arte chy- " mica ex chamæmeli Romani floribus, calidioribus præſertim in regionibus " collectis, elicitum, et eorum dotibus inſtructum, illis qui decoctum faſtidiunt, " contra colicos dolores et calculum propinatur ad guttas aliquot." *Geoff.* iii. 303. See *Elſholtius (John Sigiſmundus)* his *Deſtillatoria curioſa*, &c. *Berolini* 1674. in 8vo. or his ten experiments quoted in *Mangeti Pharmacop. Schrodero-Hoffmanniana*, (Genevæ 1687. in folio) p. 383. by which it appears that it is the flowers of the chamæmelum vulgare, or dog's camomile, that yields the ſapphirine oil; that it communicates this colour, if diſtilled with ſummitates pini, or abietis, baccæ juniperi, &c. to the oils thus obtained; and that the flores chamæmeli Romanæ do not yield a blue, but a yellow oil. " Sub- " ſtituimus etiam flores chamæmeli Romani, ſays he, ſed oleum accepimus " flaveſcens, non ſapphirinum." Which is certainly true of the oil diſtilled here from our camomile. Theſe two plants therefore may differ more in their virtues than is commonly obſerved: as *Linnæus* makes the dog's-camomile a ſpecies

ſpecies not of the anthemis, but of the matricaria, and calls it matricaria foliis ſupra-decompoſitis, ſetaceis, pedunculis ſolitariis. *H. Cliff.* p. 415.

However, on occaſion of the mentioning the uſe of this oil, *Mr. Geoffroy* (iii. 304.) ſays, "Simon Pauli obſervat, poſt C. Hoffmannum olea eſſentialia "ſtillatitia ventriculo eſſe infeſta. Reipſa hæc olea uſu diuturno & intem-"peſtivo, ardorem accendunt in ventriculo et in renibus, hepatis obſtructiones "pariunt, ſanguinem inflammant, in quibuſdam ſitim perpetuam excitant, in "aliis cachexiam bilioſam, in aliis calidum hydropem inducunt. Quapropter "non niſi maxima cautione eorum uſus præſcribendus eſt, et calidis naturis "atque bilioſis interdicendus." Whether in fact, and how, theſe come to be the effects of the too liberal and improper uſe of eſſential oils, I ſhall not enquire; but the caution concerning ſome of them is not to be contemned. The proper and ſpecific ſpirit, on which depend the virtues of many ſimples, eſpecially of the aromatic kind, being concentred in their eſſential oils, if not ſufficiently diluted, ſtimulate and irritate the ſtomach more violently than the nature of its nerves can bear, and ſo may cauſe convulſions and other bad ſymptoms, yea prove poiſons, however ſalutary the ſimples are whence they are drawn; in the uſe therefore of theſe ſimples themſelves there is far more ſafety, than in their more acrid oils. I might inſtance cinnamon, cloves, mint, hyſſop, &c. I ſay acrid oils, becauſe all eſſential oils are far from being equally acrid. Oleum aniſi, terebinthinæ, juniperi, &c. are milder than the former, yet ſtill the natural concretes themſelves are ſafer; and ſometimes contain virtues, which their oils want; as is manifeſt in the Chamæmelum. The ſun's rays diffuſed, warm and comfort; but concentrated, ſcorch and conſume.

CHAMÆPITYS.

SECT. I.

Chamæpitys, iva arthritica. *Offic.* Chamæpitys, ajuga, abiga, arthetica, arthritica, iva arthritica. *Schrod.* 561. Chamæpitys, lutea vulgaris; ſive folio trifido. *B. P.* 249. *T.* 208. *H. Ox.* iii. 424. C. vulgaris, odorata, flore luteo. *J. B.* iii. 295. C. mas. *Ger.* 525. C. vulgaris. *Park.* 283. *R. H.* 573. *Syn.* 244. Ajuga, ſive Chamæpitys mas *Dioſcoridis Lob.* 207. *Adv.* 164. Chamæpitys prima. *Dod.* 46. Teucrium foliis ſimpliciter trifidis. *H. Cliff.* 301. Common ground-pine.

It grows in ſeveral places in England. In gardens it ſows itſelf, and flowers in July and Auguſt. "It grows in fallow fields, and chalky grounds, parti-"cularly in *Kent* in great plenty, and flowers in June and July." *Miller Bot.* 132. "In agris arenoſis, ſed rarius. Junio floret." *Dale* 156. The herb is uſed when in flower. "*Offic.* Folia cum floribus, ſeu herba tota." *Schroder.* "Chamæpityos folia." *Ph. Lond.* 7.

Chamæpitys "Χαμαιπιτυς, quaſi humilis picea, quod folia piceam oleant." *B. P.* or humilis pinus. "Chamæpitys, Latine abiga vocatur, propter abortus, "ab aliis thus terræ cubitalibus ramis, flore pinus et odore." *Plin.* l. 24. c. 6. p. 609. "Latinis ajuga dicitur, ſeu abiga, quod fœtum abigat, et abortus "faciat. Nonnullis iva arthritica, quod arthritidi medetur." *R. H.* l. c. "Ivæ "nomen barbaricum unde ſit veratore opus habet." *Hoffman* p. 162. An ab abigâ, abjuga, ajuga, juga, iva?

There

There are in *Dioſcorides* l. 3. c. 175. & 176. p. 243. & 244. three ſpecies of it, viz. chamæpitys, chamæpitys altera, and chamæpitys tertia mas dicta. Some take our ground pine for the firſt, others for the ſecond, and others for the third. Vide *B. P.* & *Bod. in Theophr.* p. 826.

SECT. II.

It is an attenuating, antiſeptic, diaphoretic and diuretic vulnerary; called cephalic, and nervine: and is commended in the gout, palſy, internal ulcers, ſcurvy, menſibus obſtructis, hyſteric fits, &c. It agrees in virtues with germander.

" Nervoſum genus roborat, calfacit 2. ſiccat 3. incidit, aperit, diuretica eſt, " et emmenagoga: confert in arthriticis doloribus. *Præp.* 1. Aqua ex herba " integra. 2. Pilulæ de iva arthritica." *Schrod.* 562.

1. It is of a bitter aromatic taſte, and reſinous ſmell. " Sapore eſt amaro, non " ſine acredine quadam, quæ tamen ab amaritudine ſuperatur; odore pinum " refert." *Matth.* p. 669. " Sapore et odore picis aut reſinæ." *J. B.* " It " is bitter, aromatic, and reddens a little the blue paper: and hence ſeems to " contain a volatile aromatic oily ſalt, loaded with much ſulphur and earth. " For by a chymical analyſis chamæpitys yields ſeveral acid liquors, a little " urinous ſpirit, much oil, and yet more earth." *T. Hiſt.* p. 326. Herbæ thea is very bitter and nauſeous, and ſmells ſtrong. Sol. vitrioli turns it brownish, ſomewhat opake, and precip. a greyiſh ſediment. It gave no ſigns of an acid, nor of ſal ammon. but did not ſtink though kept ſeven weeks and became mouldy. — 2. It is nearly allied to germander, and has much the ſame virtues attributed to it, outwardly applied. " Exterius abſterſione promovet vulnerum " ac ulcerum ſolidationem, duritierum diſcuſſionem, &c." *Hoffman.* p. 162. And 3. Inwardly is much commended in all arthritic pains; " Purgare etiam " ex Dioſcoride, Plinio, et Aetio portendunt quidam: hinc apud Matthiolum " in *Dioſcor.* p. 670. ſunt pilulæ ex iva, de quibus promittunt, ſiquis utatur " in Podagra ſingulis menſibus fore immunem. Simplicior deſcriptio apud " *Lobelium* eſt *Obſ.* fol. 208." *Hoffman* p. 162. Alſo in the epilepſy, vertigo, jaundice, aſthma, hard labour, &c. " Fœtum mortuum et ſecundinas pellit, " adeoque potentur operatur, ut uſus ejus in utero geſtantibus omnino inter- " dicatur, quoniam abortum facit." *R. H.*

" Analyſi chymica, ex totius plantæ floridæ ℔v. prodierunt humoris ℔iij. " ʒxv. ʒij. gr. lx. olei ʒi. ʒvii. gr. xii. carbonis ʒx. ʒv. gr. xii, unde cinerum ʒv. ʒvij. ac inde ſalis fixi ſalſi ʒi. et jactura fuit ʒiv. gr. lx." Secundum *Geoff.* iii. 306. I ſuſpect the accuracy of this analyſis. Here are only olei ʒxv. while chamæd. ℔v. yield more than ʒxxvii. ℈i. Here ſalis ſalſi ʒi. there ſalis alcali ʒv. gr. xx. " Amara eſt et aromatica hæc planta, et ſucco ſuo chartam " cæruleam rubro colore inficit. Sale eſſentiale tartareo aliquantiſper alumi- " noſo, multo oleo et terra implicito inſtructa videtur." *Ibid.* p. 307. It is " one of the aromatica, aperientia deterſiva, et antiſcorbutica leniora, in *Boerh. Lib. de M. M.*

SECT.

SECT. III.

It may be given in ſubſtance, infuſion, decoction, &c. like germander or ſcordium. It is one of the ingredients of the theriaca andromachi.

CHELIDONIUM. } *Vide* ROOTS.
CICHORIUM. }

CICUTA.

SECT. I.

Cicuta. *offic.* Cicuta major. *B. P.* 160. *T.* 306. Cicuta vulgaris, major. *Park.* 932. *H. Ox.* iii. 290. Cicuta. *Dod.* 461. *Ger.* 1061. *R. H.* 451. *Syn.* 215. *J. B.* 3. 2. 175. Conium, ſeminibus ſtriatis. *H. Cliff.* 92. Cicutaria, vulgaris. *Cluſ. H.* ii. 200. Common hemlock.

It is common enough in fat and waſte places, about towns &c. flowering in July. The leaves are uſed. "*Officin.* Folia et radix, ſed raro." *Schrod.* 566. "Herba." *Phar. Edin. Uſu.* "Herba radix, ſemen." *Dale* 127.

This is generally believed to be the κωνειον and cicuta antiquorum; and it ſeems to agree pretty well to the deſcription given of it by *Dioſcorides* l. 4. c. 79. p. 276. "Cicuta caulem edit geniculatum uti et fœniculum, grandem: "folia ferulæ, ſed anguſtiora et gravi odoratu: in cacuminibus autem ramo- "rum propagines et umbellas, florem quoque albicantem, et ſemen ceu aniſi "at candidius: radicem denique concavam, minimeque profundam."—*Pliny* (l. 25. c. 13.) ſays "Caulis levis et geniculatus ut calami, nigricans, altior "ſæpe binis cubitis, in cacuminibus ramoſus: folia coriandri teneriora, gravi "odoratu, &c.

SECT. II.

It is narcotic, and uſed only outwardly as anodyne and diſcutient, for inflamations, hard tumors, &c. It is an ingredient of the unguentum populeon; and gives name to a plaiſter.

"Quamvis ſumme frigida cenſeatur, atque inter venenata referatur a Dioſ- "coride; nihilominus tamen frequens ejus uſus modernis eſt in tumore ac in- "flammatione lienis, ſuccus emplaſtro ſplenetico incoctus extrinſecus adhibe- "tur: hinc in inflammationibus aliis, quinimo adhibetur quoque nonnun- "quam in collyriis. *Præp.* Emplaſtrum de cicuta ſpleneticum." *Schrod.* 566.

1. It is ſomewhat of an acrid taſte, and ſtrong fetid ſmell. "Folia "odore ingrato, ſapore non ita, ſed nonnihil acri . . . Tota planta, viroſo odo- "re pernicium teſtatur." *J. B. R. H.* "Spirat odorem nauſeabundum, hor- "ridum; acrimonia quadam linguam pungit." *Wepfer. Cicut.* p. 22. "Me- "mini in puero, qui flores (*viz.* flores African.) mandere inceperat, labia et os

flata me videre; ſicuti crebro iis accidit, qui cicutæ fiſtulis ludentes aut mo- " dulantes, intra labia eas aliquamdiu continuerunt." *Dod.* 256. " The whole " plant has a ſtrong rank ſmell." *Miller Bot.* 138. " Tota odoris eſt fortis et " ingrati." *Nucl. Belg.* 79. " This plant has an herbaceous ſalt taſte; it " ſmells of fetid oil, and reddens very little the blue poper: whence we may " conjecture it contains a ſalt reſembling ſal ammoniac, involved in much oil " and earth." *T. Hiſt.* p. 258. " Totius plantæ ſapor herbaceus ſalſus eſt, " odor narcoticus, fœtidus. (above he ſays, ingratum, gravem, viroſumque " odorem ſpirat.) Succus chartam cæruleam rubro colore perparum inficit. " Unde conjicere licet cicutam ſale ammoniacali donari, cum multo oleo et " terra permiſto." *Geoff.* iii. 325. Hence *T.* can as well gueſs the conſtituent " principles without an analyſis, as *Mr. G.* can with one.—— " Analyſi " chymica ex foliorum et caulium tenerorum ℔v. prodierunt humoris ℔iv. " ʒix. ʒß. ſalis vol. urinoſi ʒi. gr. xx. olei ʒixß. carbonis ʒiij. ʒiij. gr. xviii. " unde cinerum ʒxii. gr. xii. ac inde ſalis fixi mere alcali, ʒvi. gr. lvi. (ergo " terræ ʒv. gr. xxviii.) et jactura fuit ʒij. ʒi. gr. xliv." Secundum *Geoff.* iii. 324. And cicuta contains the ſame principles with many other plants of a very different nature.—2. Hemlock is not poiſon to every other animal. Not only ſome birds eat the ſeeds, but ſeveral beaſts will feed on the leaves. Canit *Lucretius* " Pingueſcere ſæpe cicuta barbigeros pecudes, homini quæ eſt acre " venenum." I have ſeen aſſes and ſheep alſo eat it greedily.—3. All its effects externally applied, point out its narcotic quality. As 4. There are too many inſtances on record of its bad effects, to leave any room to doubt of its virulency. Vide *Wepf. Cicut.* p. 17,—34, &c. Where, among many others, there is an account of two monks, who became delirious and fancied themſelves ducks, &c. from *Kircher's Scrutinium Peſtis.* Yet there are not wanting who are of another opinion; becauſe forſooth ſome ſmall quantities of it had no ill conſequences. I hope, if they make experiments, it will be on themſelves. " Eſt cicuta in lethalium venenorum genere; &c." *Dioſcorides.* " Cicuta quo- " que venenum eſt, publica Athenienſium pœna inviſa; ad multa tamen u- " ſus non contemnendi." &c. *Plin.* Pulvis radicis ad ℈i. in febribus malignis, " vel quartana ante paroxyſmum, exhibitus, omnibus, quæ ego unquam ex- " pertus ſum, diaphoreticis antecellit." *D. Bowle. R. H.* Vide *Wepf. Cic. Aq.* p. (38. potius) 312.

COCHLEARIA.

SECT. I.

Cochlearia, cochlearia hortenſis, cochlearia rotundi folia, cochlearia Batava. *Offic.* Cochlearia, folio ſubrotundo. *B. P.* 110. *T.* 215. Cochlearia. *Dod.* 594. *J. B.* ii. 942. *R. H.* 822. *Syn.* 302. C. rotundi folia. *Ger.* 401. C. major, rotundifolia, ſive Batavorum. *Park.* 216. C. major, Batavica, ſubrotundi folia, ſive Batavorum. *Park.* 286. C. major, Batavica, ſubrotundo folio. *H. Ox.* ii. 308. Cochlearia, foliis radicalibus ſubrotundis; caulinis oblongis, ſinuatis. *Fl. Lap.* 212. *H. Cliff.* 332. Common ſcurvy-graſs.

It

It grows plentifully in many places, at a distance from as well as near the sea, in Britain, Holland, and even Lapland. But it is much cultivated in gardens, flowering in April; sowing itself. There are some varieties of it, of which the cochlearia, folio sinuato. *B. P.* Cochlearia marina. *Ph. Edinb.* or sea-scurvy grass is one; but it is never used. Inusitata. *Schrod.*

Cochlearia a foliorum forma.—Some have imagined it was the telephium, and others the Britannic herb of the ancients; but being probably a native of the more northern countries, it seems not to have been known to them. *Valentinus Andræus Moelenbrock* published his *Cochlearia curiosa*, &c. *Lipsiæ* 1674. in 8vo. *N. B.* I have not seen so small a treatise (of 140 pages only) so far as I remember, introduced with greater solemnity: it is dedicated to the *Acad. Nat. Curiosorum*, and the author complimented in Latin verses, by six different learned persons. The *index* takes up 26 pages, and *errata* one.——The leaves, or for distillation the herba florens, (folia *Schrod.* and *Ph. Lond.* herba *Ph. Edinb.*) are used.

SECT. II.

It is acrid, antacid, detergent, diaphoretic, and diuretic, agreeing with horse-radish in virtues; called splenic, and a specific antiscorbutic: and is commended in all diseases from acid and phlegmatic humors, or muriatic acrimony; and outwardly for foul ulcers, spungy gums, scabs, and other diseases of the skin.——

" Calfacit & siccat a. gr. 2. ad 3. aperit, est splenetica & diaphoretica, " fixos ac crudos humores spirituales ac volatiles reddens, putridum resistens. " Hinc utilis in hypochondriacis, morbisque tartareis primæ regionis, ac pre- " cipue in scorbuto, in cujus medicatione celeberrima audit, adhibeturque in- " tus & extus, in gargarismis, ad putredinem gingivarum, balneis ad artuum " resolutionem. *Præpar.* 1. Conserva, ex foliis. 2. Aqua stillatitia, ex foliis " recentibus. 3. Syrupus ex succo. 4. Sal volatile, ex succo. 5. Spiritus, " e foliis fermentatis. 6. Succus expressus. N. Recens maximæ est efficaciæ " ad arcendam oris et gingivarum putredinem, etiam post morbillos. Inspissa- " tus loco extracti assumi poterit." *Schrod.* 569.

For 1. It is of an acrid bitter taste, and pungent smell, not very agreeable in either. " Totius plantæ sapor cum amarore quodam acris, nasturtium re- " sipiens, sicut et odor." *J. B. R. H.* " Odoris est fortis, fere instar sina- " pios, saporis acerrimi et calidi." *Nucl. Belg.* 84. " Both leaves and flowers " have a biting hot taste." *Miller Bot.* p. 142. " Foliis est acribus, pungenti- " bus, amaricantibus, odoris nidorosi, ingrati." *Geoff.* iii. 343.—2. Foliorum thea is not much tinctured, smells a little of the herb, and is very bitter, but not hot to the taste. It only dilutes syr. violarum: makes no change on the blue paper, and very little on the (tincture or) solutio heliotropii, bringing it only to an amethyst colour, and so does not redden it so much as did horse-radish tea. Solutio vitrioli turned it to a deep transparent green colour, and in a day's time precipitated a little dark grey sediment, which calcined became red like colcothar.—3. Its acrimony and virtues are volatile, rise easily in distillation, and are lost in drying; and it yields plenty of volatile, but no fixed alcaline salt, or

very little, (Vide *Boer. Chem.* ii. p. 33. No. 6.) and ſome oil: ſo that it is a natural ſapo volatilis; yet not ſo acrid as redcole.—4. Externally it heats, inflames, and deterges powerfully. " Cochleariæ ſuccus, (cum herba contuſa, impoſita, " et alligata), faciei maculas ſex horarum ſpatio tollit, poſtea vero decocto fur- " furis eſt abluendus." *D. Palmer è Prælect. D. Hermanni.*" *R. H.* This is not in the cynoſura.—5. Inwardly it attenuates, diſſolves, volatiliſes the humours; and is much uſed in the ſcurvy, cachexy, dropſy, green-ſickneſs, vapours, &c. " Cochlearia acris eſt, et calida, ſale volatili abundat . . . Partes ejus in qui- " bus præcipua vis et utilitas conſiſtit, admodum volatiles ſunt et coctione facile " evaneſcunt . . . " In epilepſia contortas partes fovere convenit ſpiritu cochleariæ, quo ſæpiſſime hoſtem fugari gloriari poſſumus." E *Doleo. R. H.* Where in excreſcentia gingivarum ſcorbutica, alum is added to the ſuccus cochleariæ.

" Analyſi chymica cochleariæ floridæ ℔v. demptis radicibus præbuerunt " humoris (primo albicantis deinde limpidi ſaporis acris pungentis, odoris pe- " netrantis, cochleariam crudam referentis; tandem ſaporis minus acris, et aci- " di ℔ij. ℥xivß. gr. lx. humoris acidi empyreumatici, poſtea acidi auſteri, " ℔i. ℥x. gr. lx. humoris rufeſcentis, ſale volatili urinoſo impregnati ʒvii. gr. xxiv. in all humoris ℔iv. ℥ix. ʒv. olei ſpiſſi ʒvi. carbonis ℥iij. ʒi. gr. liv. unde " cinerum ℥i. ʒvi. gr. vi. ac inde ſalis fixi mere alcali ʒvi. gr. xlviii. (ergo ter- " ræ ʒvii. gr. xxx.) et jactura fuit ℥ij. ʒij. gr. xliv." Secundum *Geoff.* iii. 343. But here are but ʒvii. gr. xxvi. ſo that gr. xlvi. are wanting of ℔v. It is a very ſingular plant if this be a genuine analyſis. " Phlegma, quod primum " in diſtillatione prodit, turbidum eſt ab oleo quodam tenui, acri, pungente, " et ſumme volatili, a quo plantæ odor et ſapor acris præcipue pendent. " Præterea ſale eſſentiali ammoniacali donatur hæc planta, copioſo phlegmate " diluto." *Ibid.* p. 344. Here alſo, as is ordinary, much more is borrowed from *R. H.* than is owned.

SECT. III.

The juice, conſerve, and infuſion are given by ounces; the ſpiritus cochleariæ to ℥ß. It is one of the ingredients of the ſucci antiſcorbutici, aqua Raphani compoſita, the ſpiritus cochleariæ, and of the tinctura laccæ.

N. B. Cochlearia is one of the antacida, acria alcaleſcentia, et ſpecifica ſcorbutica acriora vegetabilia, in *Boerh. Lib. de M. M.*

CROCUS.

SECT. I.

Crocus, *offic.* Crocus ſativus. *B. P.* 65. *T.* 350. Crocus. *Dod.* 213. *J. B.* ii. 637. *Ger.* 151. *R. H.* 1176. *Syn.* 374. C. verus, ſativus, autumnalis. *Park. Par.* 167. C. autumnalis, ſativus; ſeu hortenſis. *H. Ox.* iii. 335. Crocus, flore fructui impoſito, autumnali. *H. Cliff.* 18. Saffron, and true ſaffron-crocus.

Crocus,

Crocus, floribus fructui impositis, tubo longissimo. *Royen. Lug.* 41. *H. Upsal.* 15 M. m. 10. C. spatha univalvi radicali; corollæ tubo longissimo. *Sp. Pl.* p. 36. Auctori huic omnes croci autumnales et vernales sunt nisi varietates. Habitat, inquit in Alpibus Helveticis, Pyrenæis, Lusitanicis, Thracicis.

Where it grows naturally I cannot find. *Linnæus* l. c. makes the crocus Alpinus autumnalis. *B. P.* 65. a variety of the crocus sativus. *B. P.* and adds, "Crescit in Thracia, Lusitaniæ rupibus, Pyrenæis. An hæc a sequenti "(to wit, the vernal crocus) pro specie, vel pro sola varietate sit habenda, "dijudicent quibus dijudicandi est facultas. Stigma hujus floris est, quod "sub nomine croci in officinis prostat."——"Crocum montanum primum "(which is the c. alpinus autumnalis, *B. P.*) nascitur in nonnullis Lusitaniæ "rupibus, præsertim iis quæ non procul a mare absunt, ubi Novembri obser- "vabam, et cum suo flore eruebam, anno 1564. et amicis in Belgium mitte- "bam. Istic etiam Septembri floruit." *Clus. Hist.* 209. Though the mountain autumnal crocus, and the spring crocus, and their varieties, carry here plenty of seed, yet the true saffron never bears any. The embryo-fructus is scarcely visible. "De loco natali ubi sponte oritur, nihil certi traditur: feritur au- "tem in plerisque provinciis, ut Sicilia, Italia, Pannonia, Gallia, Germania, "Anglia. De semine altum apud botanicos est silentium . . . Semen apud nos "quantum audivi, nunquam fert, nec alibi ut puto, in frigidioribus: in locis "autem ubi sponte oritur, semen perficere, minime dubium est." *R. H.* The stigma of it differs widely from that of all the other croci; so if ever it carries seed, it is evidently a different species: if it is always barren, it must be a variety; but only if it came originally from the seed of another crocus. And indeed altum est de semine silentium, as *R. H.* expresses it. Yea Theoph. and Pliny say it is propagated by the roots (only): and *Crescentius* an Italian, (in his *Agricultura*, Basiliæ 1538. in 4to) says it is not sown for a very good reason, *viz.* quia semina non producit. *J. B.* ii. 638. which is one singularity. In our gardens it begins to put out its leaves about the middle of September; and towards the end of it, and all October, it flowers: which will stand or remain in fair weather, four or five days, after the saffron appears in them, and may be gathered.

"Floris flammea stamina (instar antheræ) officinarum crocus est." *Schræd.* 574. "Crocus flor. stamina. (i. e. florum stamina.)" *Ph. Edinb.* p. 8. "Cro- "cus, saffron; the flowers and stamina, *manured saffron, Casparis Bauhini.*" *Lewis. Pharm Edingh.* p. 26. Here is a double error; which may make some believe that the author was unacquainted with books which treat of simples, if not with the simples themselves. "*Usu* styli terni, prælongi, flammei ruboris." *Dale* 245. But saffron is only the upper end of the stylus, or appendix ovarii, which is divided into three slender, trumpet-like, parts, and of a deep red, or yellow colour, and which *Linnæus* calls the stigma; and has not its like.

The flowers are gathered every day; and the saffron, being picked out of them, is dried in little portable kilns, made for that use; and formed into square cakes. Great quantities of it grow in England, particularly in Essex, Suffolk, and Cambridgeshire. It is computed, that an acre of good ground, well managed, may yield, communibus annis, ℔viii. & ix. of good dry saffron, or in three years ℔ xxvi. (about ℔v. of wet going to make ℔i. of dry saffron.) The whole expences will not exceed in three years 23 pounds 12 shillings: and con-

ſequently, reckoning the ſaffron to ſell, one year with another, at 30 ſhillings per pound, the neat profits of an acre of ſaffron, will amount to five pounds, two ſhilling and eight pence annually. See an account of the culture and management of ſaffron, by Dr. *J. Douglas*, *Phil. Tranſ.* No. 405. or in *Miller*'s *Dictionary* Vol. I. Art. Crocus. I found that 14 and ſometimes 15 flowers afforded only one grain weight of dry ſaffron. So that ℥xvi. Troy-weight of ſaffron require 107520 flowers; no wonder it ſells dear.

Dioſcorides l. 1. c. 25. p 20. prefers the Corycian ſaffron to all other; next to that the Lycian, then the Æolian: but the Cyrenaic and Sicilian, he ſays, viribus minus pollent; quippe cum ſint omnia olerum inſtar ſativa. "Crocus in Vien-"nenſi agro optimus hodie naſcitur. Qui ex locis orientalibus, ac præcipue "ex Sicilia tranſmittitur, in cujus monte (Caryco nomine) omnium præſtan-"tiſſimus provenire cenſetur, orientalis dicitur; vulgoque crocus de aquila." Vide *Schrod.* 574. Some eſteem moſt the Calabrian. The French like their own beſt. The Spaniſh is generally condemned, as ſpoiled with oil. But here no ſaffron is comparable to the Engliſh: not becauſe "the beſt ſaffron in "the world grows in England," (as *Miller Bot.* 160. aſſerts), but becauſe we can have it freſh, genuine, well cured, without any foreign mixture, or being ſpoiled by previous infuſions. For no doubt Italian, French, or even Spaniſh ſaffron, if as recent, and well managed, would be as good as the Engliſh; but ſuch is not to be found in Britain: ſo that crocus Anglicus only ſhould be uſed here.

For ſaffron is eaſily ſophiſticated, adulterated, and ſpoiled, and the cheat not eaſily diſcovered. "Hodie ſcribit *Coſt.* (in *Diacur. Meſue* p. 104.) adulteratur "carnis bubulæ filamentis: ſed adulterium deprehenditur abiis, qui ſæpe trac-"tarunt crocum ingenuum. Color enim eſt minus vividum, nec inficit manus." *Hoffman* p. 200. Sect. 13. "Qui vulgo venditur fere eſt corruptus cartamo, "ſeu crico, quem crocum Sarracenicum vocant." *R. H.* But the moſt common fraud is to mix a little good ſaffron with a great deal of that whence the tincture is drawn, or is otherwiſe ſpoiled. This I have ſeen practiſed in Holland, where the druggiſts ſell three or four ſorts of ſaffron, at very different prices; but where the deareſt is in reality the cheapeſt. "There are three ſorts of "ſaffron in the ſhops; two from abroad, one the produce of our own country, "vaſtly preferable to the two former, and which ſhould be alone uſed in "medicine. This is of a fiery red colour, and yields a very deep yellow "tincture: its blades are broader than thoſe of the foreign ſorts. It ſhould "be choſen freſh, not above a year old, in cloſe compact cakes, neither dry, "nor yet very moiſt, of the ſame colour within as without, and of a ſtrong "acrid ſmell." *Lewis Pharm.* p. 26.

"Crocum natura herbaceum, folio, anguſto, nam fere in capillamenti mo-"dum foliatur; ſero floret, ſeroque germinat, aut præmature: utro ſcilicet "modo tempus acceperis. Floret quippe vergiliarum occaſu, pauciſque die-"bus. Confeſtim vero cum folio florem quoque expellit, quin immo prius. "Radix multa, carnoſa, in totumque vivax. Radiceque pede attrita melius "provenit, ideo juxta ſemitas, aliaque loca pedibus trita commeantium, pul-"cherrimum exit. Satus radice fieri aſſolet." *Theophr. H.* l. 6. c. 6. p. 644. "Crocum in uſo medico præſtantiſſimum eſt Corycium, recens ac probe colo-"ratum, paulum candidi gerens in capreolo, oblongum, ſuis partibus omni-

" bus conſtans, minime fragile aut pingue, plenum, cujus dilutum manus in-
" ficiat, non carioſum aut humidum, odore illiciens ac leviter acre. Nam
" quod tale non eſt, aut vetuſtum eſt, aut maceratum." *Dioſcor.* l. 1. c. 25. p. 20. (Vide *Bod. in Theoph.* p. 663. ad 667.)

That this is the κροκος of the ancients is evident from what Theophraſtus, Dioſcorides, Pliny, &c. have ſaid of it. In *Hebrew* it is called carcom, and is one of the curious plants of the garden deſcribed by Solomon, *Cant.* iv. 14. In the *Septuagint* Ναρδος και κροκος καλαμος και κιννα μων, &c. Spikenard and ſaffron, calamus and cinnamon, &c. In Arabic, ſapharan, *Celſius Pl. S. S.* 2. p. 11. whence the modern names: κροκος in *Homer* (*Hymn to Pan*, v. 25.)

Εν μαλακω λειμωνι, τοθι κροκος ἁ δ' ὑακινθος.
Ευωδης θαλεων.——

In molli prato, illic crocus et hyacinthus ſuaviter ſpirans, &c. Crocus et c. Ægyptius in *Hipp.* though not among the plantæ Ægyptiæ of *Alpinus.* In a word, it is celebrated by all the ancients. " Cui jure applicem Martialis
" verſum l. 4. Epig. 10. Nec poteris croci dotes numerare, nec uſus." *Celſ.* l. 1. p. 11.

Ἠωϛμεν κροκοπεπλος ἐκιδνατο πασαν επ' αἰαν. H. Θ. Ψ. 1.

Aurora quidem croceo-peplo-induta, ſpargebatur totam per terram.

Tithoni croceum linquens aurora cubile. *Æneid* iv. v. 585.

Crocus, or crocum, from κροκις, or κροκη, trama, filum, the filaments in the middle of the flower being the only uſeful part of the plant. Hence alſo the ſtamina of other plants are called κροκιδες; as of the nymphæa, *Dioſcor.* l. 3. c. (131. in Hoffman and R. H. errore pro c.) 148. p. 233. and of the lilium, *Plin.* l. 21. c. 5. p. 544. Vide *Hoffman* p. 198. and *R. H.* 1173. But in the places cited, *Saracin* has it κροκωδες, and *Dalechamp* crocis. The Arabians call it ſahafaran, (*Hertodt*), zapheran (*Lemery, D.*) zahafaran, (*Geoffroy*) or zaffaran; " Arabes zaffaran, aut potius zahafaran habent, quam vocem
" omnes, quod ſciam, Europæi receperunt." *Hoffman* l. c. and hence ſaffron.

N. B. " The ſaffron flowers blow in September, but the leaves come not
" forth till the ſpring. *Miller Bot.* 159. " Crocus commodiſſime et vulgatiſ-
" ſime per bulbos propagatur, ex ſemine enim ejus tardior eſt proventus, (he
" ſays above, radice eſt tuberoſa.) Hi bulbi verno tempore terræ committun-
" tur. Folia tantum viridia hoc anno proferunt, flores vero anno ſequenti
" menſe Octobri. Flores unum aut alterum tantum diem, poſtquam expanſi
" fuerint, durant. A floribus prodeunt ſubinde folia, quæ tota hyeme vireſ-
" cunt, areſcunt hæc, ac prorſus deperduntur vere, et nunquam per æſtatem
" apparent. Quamprimum flores expanduntur, leguntur oriente vel occidente
" ſole . . . Radix menſe Octobri, cum planta floret, bulbo conſtat ſingulari, ſe-
" quente autem vere et æſtate, duplici, quorum alterum alteri ſuperius inſidet.
" Cum enim veris initio folia increſcunt, ſuperior radicis pars ex qua folia
" exeunt creſcit pariter, donec æſtate parentem cui inſidet, mole æquet.
" Hac itaque ſolidam, plenam, ſuccoſamque conſtitutionem nacta, radix inferi-

" or

" or languida, exſucca et flaccida redditur, atque autumno tota evaneſcit. " Poſtquam defloruerint bulbi, eximuntur e terra, quod Octobri exeunte con- " tingit. Servantur per totam hyemem in ſicco loco nulla terra involuti, & " procul a radiis ſolaribus, ne coquantur, ſed ut plenius matureſcant; quod " ex foliis ſi ſicca evadant, dignoſci poteſt. Dehinc redeunte vere iterum in " terram inſeruntur." Thus *Geoff.* ii. p. 283. & 284. Vide *Hertodt.* p. 16. vel *Petri Laurembergii*, *Appar. Plant.* c. 6. f. 46. Here are no leſs than a dozen of groſs errors, which would never have ſeen the light, if either the author, or his editors, had known any thing of the hiſtory, or culture of this plant; though they deſcribe it, and that with its fruit and ſeed too; which I have not met with any where elſe. For the botanical character of the genus is taken from the other ſpecies, not from the crocus ſativus. *B. P. Miler*'s blunder is but a trifle to theſe.

" Adulteratio croci adeo impoſtoribus communis eſt, ut emporiis nonnullis " viſum ſit certos deputaſſe inſpectores, quorum judicio ut bonus crocus ve- " nalis pronunciatur; ita adulteratus Neptuno, Vulcanove, non citra vendito- " ris ignominiam, conſecratur. Cujus rei exemplum hic Francofurti, aliquot " abhinc retro annis, obſervare licuit." *Schrod.* 574.

SECT. II.

Saffron is an attenuant, diaphoretic, and anodyne aromatic; a famous cordial; and ſaid to be alexipharmic, cephalic, nervine, pectoral and uterine. It is commended internally in lowneſs of the ſpirits, palpitation of the heart, vertigoes, ſyncopes, aſthmas, jaundice, menſibus et lochiis obſtructis, hard labour, vapours, meaſles, ſmall-pox, malignant fevers, &c. and externally for inflammations, pains, tumors, &c. *ad multa utilis.*

" Cordialis eſt ac pulmonicus, ut quoque anima pulmonum audiat, et ute- " rinus; et hinc cæteris viſceribus familiaris. Calfacit 2. ſiccat 1. aperit, di- " gerit, emollit, anodynus eſt, ſomnum conciliat, menſes ac fœtum pellit. " Uſus frequens in ſyncope, apoplexia, (gutta i. aut ij. tincturæ aſpergitur lin- " guæ) in hyſtericis affectibus, in ictero, in peſte, aliiſque venenoſis morbis, in " aſthmate (cum oleo amygd. dulcium.) Doſis ad ℈i. extrinſecus in collyriis, " et ſimilibus adhibetur. *Præp.* 1. Species diacurcuma. 2. Tinctura ſeu eſſen- " tia croci. 3. Extractum. 4. Oleum croci *Meſuæ* compoſitum. 5. Oleum " ſtillatitium, ſed rariſſimum eſt, ob nimios ſcilicet ſumptus quos requirit. " Nimirum ex croci ℔i. vix olei ʒi. elici poterit. Habet poteſtatem proſter- " nendi appetitum. 6. Trochiſci de croco. 7. Electuarium de ovo dictum. " 8. Emplaſtrum oxycroceum. *N. B.* Uſus croci immodicus, ſcilicet ad ʒij. " vel ʒiij. lethalis cenſetur." *Schrod.* 574. Stimulans aromaticum eſt, in *Boerh.* " *Lib. de M. M.*

For 1. It is of a ſoft, or as it were oily, bitter, and agreeably aromatic taſte; and fragrant diffuſive, and ſomewhat pungent, though pleaſant ſcent. " Sta- " mina colore flammeo ſubrubentia, odore, cum inaruerint, forti et caput im- " plente." *Ded.* 213. Stamina ex ruffo-punicea collecta aroma celebre confici- " unt, omnibus crocus ſeu crocum apellatum, guſtu amariuſculum, odore ju- " cundo, acri, late ſpirante, oculos aliquantum mordicante, lachrymas profun-

" dere

" dere cogente, et modice, cum ſuavitate non ingrata, caput aggravante ſom-
" numque conciliante." *Bod. in Theophr.* p. 666. whoſe deſcription of this plant is copied in *R. H.* " Odore peculiari, jucundo, acri, aromatico, ſubtili et late
" ſpirante, oculos aliquantulum mordicante, modice caput gravante, ſoporem-
" que conciliante, ſapore amariuſculo." *Geoff.* ii. 282. " Odorem ſpargit fra-
" grantem in diſtans ſpatium; et ſaporis eſt acris, balſamici et ſubamari." *Nucl. Belg.* p. 92. And it is obſervable that it is more odoriferous after it is well dried than before. Wet ſaffron, or ſaffron in the flower, has comparatively but little ſcent.

Hence it keeps well, and may be preſerved, viribus fere integris, ſeveral years; and affords not much by a ſimple diſtillation. Vide *Zwelf. Pharm. Reg.* 703. and *Hoffman*, in *Schrod. Mang.* p. 400. — 2. It contains very little eſſential oil. (Vide *Schrod.* ſupra.) " Oleum eſſentiale croci nullibi extare legi-
" mus, nec vidimus." *Zwelf.* l. c. p. 704. " *Prof. Newmannus* denies that an eſſential oil, fixed ſulphur, and volatile ſalt can be ſeparated from ſaffron, which he calls, " corpus mixtum aquoſo-gummoſo-terreſtre, in quo, ſays he,
" quædam partes adſunt oleoſæ rarefactæ, una cum reſinoſis, nec non ſubtiliſſi-
" mis ſalinis, haud tamen inde ſeparari queant. Ex croci enim in balneo ſic-
" cati ℥ijß. per deſtillationem obtinuit liquoris grate-olentis ℥ß. in quo nullum
" adfuit oleum ſubſtantiale. Reſidui erant ℥ij. Ex cujus ℥i. obtinuit extracti
" ſpirituoſi ʒv. ℈i. extracti ſecundi aquoſi ʒi. ℈ß. et partis terreſtris ʒiß. (here
" was nothing loſt.) Ad alteram croci ℥i. primo aſſumſit aquam et habuit
" extracti primi aquoſi ʒvi. extracti ſecundi ſpirituoſi ℈i. et remanentiæ ℈v.
" (why more than before?) Unde apparet partes gummoſas in croco prævalere reſinoſis." Vide *Rieger. Introd.* ii. 1143. who adds, " ſi credamus auctori anno-
" tationum ad Neumanni locum, oleum eſſentiale ſeparatum omnino haberi po-
" teſt, et quidem ad pondus ʒiß. ex croci ℔i. quod adeo penetrans, mordaxque
" eſt, ut gut. i. deguſtata, vel per 20 ad 30 horas in lingua ſentiatur; ac a quo-
" libet produci poteſt ex extracto cum aqua facto, modo ſaltem croci ℔ß. aſſu-
matur." —If this be fact, well might Boerhaave, on a new account, call crocus an
" heteroclytum corpus quod vix referri queat ad aliquod notum rerum genus." Vide *Chem.* ii. 244. — 3. It yields its tincture and ſtrength equally to ſpirit and to warer; yet, they ſay, oil draws nothing from it. I infuſed ʒij. of my own ſaffron in ſp. vini Gallici ℥ij. and after ſome days filtered it, and the dried reſiduum weighed only gr. lv. though the ſaffron was more than two years old. — 4. Externally applied it eaſes pain, ſoftens, diſcuſſes or ripens; and is uſed in collyriums for ſore eyes; in cataplaſms, &c. for burnings, cramps, gangrenes, &c. applied to the temples, it is ſaid to procure ſleep; yea, and the ſmell or vapour of it to have proved ſometimes mortal. Although *Galen* in ſeveral places commends crocus for pains, as of the eyes, ears, &c. yet he ſays " Quidam ex ejus uſu capite læduntur, quod ipſum ſæpe ex ſolo croci
" odore perpetimur . . . . . Sunt qui neque croci odorem citra moleſtiam
" ferunt, ſed ſtatim capite replentur." κατ. τοπ. l. 2. p. 135. D. — " Vapo-
" rem croceum mortiferum extitiſſe refert *Borellus*, (*Obſ. Cent.* 3. f. 303.) de
" quodam famulo mercatoris, qui juxta magnam croci copiam decumbebat et
" dormiebat, cum vero nullum malum inde procedere poſſe exiſtimaret, atque
" in eadem officina ſemper remaneret, inde tantum dolorem capitis, tantamque
" cordis debilitatem contraxit, ut vitam cum morte commutaret. Similes hiſ-

" torias ſcribit *Coſtæus*, multos qui croci ſacculo pulvinaris inſtar uſi eſſent, o-
" borto inſigni capitis dolore, cum incredibili gravitate interiiſſe." *Crocologia* (ſeu *curioſa croci regis vegetabilium enucleatio*, &c. *Jenæ* 1671. in 8vo.) p. 33. —5. It is ſaid to be very hurtful to horſes. " Equis maxime exitialem eſſe " crocum, ex veterinatorum (*veterinareorum*) relatione ſcribit *Friccius*, modicam " nempe ejus quantitatem, etiam validiſſimo equo exhibitam, lethale urinæ " profluvium cauſari." *Rieger. Introd.* ii. 1154. " Audivit etiam *Borellus* (*Obſ. Cent.* 3. f. 303.) equos mictu ſanguineo perire, dum croci copiam ferunt." *Hertodt.* p. 33. " Borellus in his obſervations ſpeaks of a perſon, who by " carrying a parcel of ſaffron a long journey, for the ſale of a market, was " ſo affected, by its ſcent only, as to piſs blood." *Quincy Pharm.* p. 156. Videatur Borellus, ut et Etmullerus " Agaſo quidam dormiens Piſauri ſuper " duobus croci ſaccis, eadem nocte interiit. Ex *Amato*." *Hoffman* 202. Yet it does not hurt dogs: and mice ſeem to be very fond of ſaffron roots. — 6. Saffron inwardly taken dies the urine. (*Boerh. Chem.* ii. 246:) and even the fœtus in utero alſo. *Amatus Luſitanus* (Curat. cent. 5. f. m. 71.) refert mulie-
" rem quandam, ab epoto medicamento, cui crocus admixtus eſſet, duas puel-
" las ab extra coloris lutei, peperiſſe: et coloris cauſam ipſi croco attribuit,
" ſigno deſumpto, quod color lotura aquæ diſparuerit . . . Canem fœminam,
" trium vel quatuor ſeptimanarum gravidam ſumpſi, cui toto reliquo geſtatio-
" nis tempore tam cibum quam potum croco tinctum exhibui, donec octo
" forſan dies ad partum ſupereſſent, ubi ultimis tribus diebus etiam ad ʒij. ʒiij.
" croci juſculis addidi . . . . ſecta in cane tota abdominis regione, ut et utero
" et placentis, colliquamentum non exiguo colore croceo tinctum viſebatur.
" . . . . In catellis albidiores cutis particulæ plenarie croceo colore tinctæ
" fuerant . . . . Quo modo vero chylus albicans, nec croco tinctus, in vaſis
" lacteis, per meſenterium diſperſis, ſe viſui obtulerit, altioris eſt indaginis, &c.
Vide *Hertod.* p. 278. In a moderate doſe it chears the ſpirits, invigorates nature, eaſes pain, and diſpoſes to ſleep: but taken in too great a quantity it intoxicates, cauſes head-aches, heavineſs, deliriums, profuſe laughter, convulſions, death, if teſtimonies are to be credited. " Vim habet crocus concoquendi,
" emolliendi, leviter aſtringendi et urinas ciendi. Elegantem colorem præſ-
" tat, crapulamque arcet, ex paſſo bibitus . . . Venerem quoque ſtimulat . .
" Aiunt etiam exitioſum eſſe, ſi ʒiij. pondere ex aqua bibatur . . . . Cæterum
" et ipſius radix ex paſſo pota urinas movet." *Dioſcorides* l. c. " Papave-
" ris ſuccus, et myrrha, et ſtyrax, et crocus, hæc ſi largius bibantur, quædam
" dementant, quædam mortem inferunt: verum convenienti quadam menſura
" aliis admixta, adjuvant." *Galen. Simpl.* l. 5. c. 19. p. 37. C. " Vidimus (in
" quit *Amatus in Dioſcor.*) mercatorem, qui cum plures croci ſarcinulas emiſſet,
" multum ex illo in ollam, carnes jurulentas pro cœna continentem injeciſſet, poſt
" earum eſum, in tam intenſum et vehementem riſum incidiſſe, ut non multum
" abfuerit, quin riſu et cachinno e vita diſceſſerit. Simile exemplum eſt apud
" *Jul. Alexandr. in Salubr.* Nos, ait, nobilem fœminam Tridenti vidimus, hora-
" rum circiter trium ſpatio, immodico riſu concuti, eliciendorum forte menſium
" cauſa, juſto plus croco uſam. Dubium non eſt, ſi plus croci ſumpſiſſent,
" aut debiliores fuiſſent, mortui eſſent." *Hoffman.* p. 201. *Homerus* (*Iliod* ξ. v. 347.) " deſcribens concubitum Jovis et Junonis, tellurem finxit produxiſſe va-
" rios flores venereos, et inter hos crocum." *Ibid.* p. 202. From what is ſaid,

does it not appear more than probable, that saffron rarifies the blood, or relaxes the fibres, and agreeably tickles, rather than stimulates the nerves? That its operation is analogous, in some measure, to that of ambergrise, generous wines, yea, and in part of opium itself? Hence it is so much commended by *Bontius* (*Med. Ind.* 23.) in the dysentery, tanquam specificum medicamentum et præstantissimum. "Putoque, says he, verissimum hujus morbi, sæpe etiam venena-"ti, antidoton esse extractum croci," in which he found even an infusion of rhubarb in a decoction of tamarinds hurtful. But since saffron is "adeo secluſæ "naturæ, ut prorsus referri vix queat ad aliquod notum rerum genus, simul-"que possideat pulcherrimas nec aliunde imitabiles virtutes;" as *Boerh.* well observes, and its extract with sp. vini, "quasi nova species materiæ quam "vix oleum, spiritum, gummi, resinam, gummi-resinam, appellare possumus; "sed prorsus singulare quid, ad oleosum spirituosum pertinens," (Vide *Boerh. Chem.* ii. 244.) No wonder its primary or most physical action be not easily determined. And, — 7. It is also commended in apoplexies, palsies, cough, consumption, pleurisy, cardialgia, colics, fluxes, hæmorrhages, &c. but in some of these at least it seems rather hurtful." "Ob vires quas in omnibus fere "morbis curandis præstat insignes, a nonnullis panacea vegetabilis insignitur." *Hoffman in Schrod. Mang.* p. 400. "Tanti crocum fecere chemicorum princi-"pes, ut aroma philosophorum appellarint, perque primas literas vocabularum "atroph." Vide *Boerh. Chem.* ii. proc. 65. p. 244.) Who calls the "Extrac-"tum croci essentiale, verum Paracelsi atroph." — "Corroborat quoque cro-"cus cor, thoracis crudos humores ad concoctionem perducit, pulmones ape-"rit, et ab obstructione expedit, et ad hæc tam efficax remedium, ut subinde "phthisicis in summo vitæ discrimine, et propemodum animam agentibus, "spiritum reducat et vitam ad aliquot dies proroget, ʒß. aut ad summum ʒi. "cum passo aut vino dulci, exhibitus." *Dod.* 213.

Quæritur, Do the virtues of saffron depend most on its action on the fluids, or on the nerves?

"Crocus analysi chymica spiritum acrem exhibet tenuem et summe volati-"lem, qui primo prodit in distillatione, licet parva quantitate; deinde phleg-"ma subacidum, cum heliotropii tincturam rubro colore inficiat; perparum "olei cum salis volatilis urinosi tantillo. Nonnihil salis alcali fixi ex capite "mortuo lixivii ope extrahitur . . . . Solutioni croci superaffusum oleum tar-"tari, nullam mutationem affert: sed aqua calcis colorem album contrahit, "cum levissima effervescentia, tenuique coagulo, ratione acidi in croco deli-"tescente." *Geoff.* ii. 284. *An imaginary analysis.*

SECT. III.

Saffron may be given in substance to ʒi. tho' ʒß. is seldom exceeded: and the tincture to ʒß. which contains the tincture of ʒi. The extract to gr. xii. — Saffron is an ingredient in the spiritus lavendulæ compositus, tinctura balsamica, tinctura opii, elixir pectorale, elixir proprietatis, E. p. cum acido, tinctura sudorifica, pulvis contrayervæ compositus, pulvis ad partum, confectio alkermes, electuarium cardiacum, Mithridatium, theriaca utraque, pilulæ rufi, pilulæ pacificæ, pilulæ pectorales, trochisci cypheos, trochisci hedychroi, & emplastrum oxycroceum.

" Legi apud peritiſſimos quoſque ſi detur in vino dulci, calido actu, croci " tenuiſſime pulveriſati ℈ß. aut ad ſummum ℈i. ut *Dod.* habet (quamvis came- " rarius etiam aſcendat ad ʒß.) conſiſtere intra ſalutis terminos . . . . Sed quæ " eſt illa doſis a qua periculum eſt ? Mihi diſtincte nihil compertum eſt. Dio- " ſcorides quidem, Serapio, Avicenna, Conſtant. Africanus, omnes ex alio- " rum ſententiæ, ſcribunt ʒiij. interficere. At Jul. Alexandrinus ʒiij. habet. " Inquit enim, quadrantis pondere potum, nimis effuſum parit gaudium, &c. " Quod quia ab experientia nova pendet, relinquo in medio." *Hoffman* p. 201. Sect. 19. & 23. " Veruntamen apud Polonos, teſte Etmullero, adeo familia- " ris eſt uſus croci, ut eum ad ʒi. ſæpe cibis ſuis immiſceant. Sed quid con- " ſuetudo valeat, ex opii uſu diuturno ſatis liquet. Itaque croci ſubſtantia a " ℈ß. ad ℈i. & ℈iß. tuto præſcribi poteſt. Tinct. doſis a gut. iv. ad xx. " Extractum exhibetur a gr. ii. ad x." *Geoff.* ii. 287.

The *Lond. Pharm.* has no tinctura croci, but a vinum croceum, made by infuſing ſaffron in canary; of which is made ſyrupus croci alſo. Our tincture is drawn with French brandy, and keeps better. I have it 20 years old, and ſtill very good. There is no need of rectified ſpirit, nor ol. tartari here; much leſs for diſtilling the tincture. We have no extract.

LECTURE LVI.

CUSCUTA.

SECT. I.

1. Cuſcuta, caſſytha, cuſcuta major. *Officin.* Cuſcuta major. *B. P.* 219. *T.* 652. *R. Syn.* 281. Cuſcuta. *Park.* 10. *R. H.* 1903. *H. Ox.* iii. 615. Caſſutha, *Dod.* 554. Caſſuta, ſive cuſcuta. *J. B.* iii. 266. Cuſcuta ſive caſſutha. *Ger.* 577. Cuſcutæ ſpecies. *Linnæi Gen. Pl.* p. 53. Dodder. *vulgo* Hellweed, and Devi's-guts.

2. Epithymum, cuſcuta minor. *offic.* Epithymum, ſive cuſcuta minor. *B. P.* 219. *R. H.* 1904. Epithymum. *Tab. Ic.* 357. *Ger.* 577. Caſſutha minor. *Dod.* 544. Cuſcuta minor. *T.* 652 Dodder of thyme.

Theſe are not ſpecifically different, yea ſcarcely can be called different varieties, being bigger or ſmaller, according as the plant is on which they grow; and ſo they are reckoned one and the ſame plant by *Park. J. B. Moriſon*, &c. Mr. *Ray* indeed leaves it as uncertain.

It is an annual, paraſitical plant; which though propagated by its ſeed, ſown in the earth only, yet unleſs it be ſo near another that it can twiſt itſelf about it, ſoon dies. " Experimentum *Tragi* affero et *Penæ*, qui cuſcutam videre " natam ſemine ſuo e terra, poſtea vero, ut plantæ ſuæ inſinuavit, areſcente, " radice ex qua exſtiterat, alimentum cepiſſe inde. Ego quantumvis diligenter " inquiſiverim, nunquam potui invenire radicem, quæ terram contingeret." " *Hoffman* p. 211. " Verum ex accuratione obſervatione *D. S. Dale*, radices, " quæ longæ ſunt, et fuſci coloris, non ita ſtatim intereunt; imo, ut ei vide-

" tur, non intereunt omnino, ſed plantam ipſam propagant: quamvis verum " ſit ex Parkinſoni, et noſtra obſervatione, ſi ſemen in fictili ſeratur, emergere " quidem plantulam, ſed brevi radicitus perire, ſi non ſint in propinquo ſtirpes " quibus irrepat: unde procul dubio, aliquam ſaltem alimenti ſui partem inde " exugit." *R. H.*

It is found on flax, and on it only have I ſeen it growing in our country; elſewhere alſo on nettles, hops, bramble, tares, hyſſop, thyme, &c. It has no leaves, but ſlender, thread-like ſtalks, which ſtick faſt to the bark or ſkin of the plant it grows on by means of little rough papillæ, which inſinuate themſelves into it, penetrate its veſſels, and receive the nouriſhing juice they pour out. (Vide *T. Hiſt.* p. 426.) It is controverted whether the dodder growing on one plant differs in qualities from that of another. Whether it partakes of the virtues of the plant that ſupports it; what plant carries the beſt, and which is to be taken when ſimply cuſcuta is ordered. I think them all alike, in the ſame climate. It is found in plenty on the thyme about Paris; yet what is uſed there is brought from the Levant, and in the ſhops called *epythymum venetum. T.* l. c. — *Parkinſon* p. 11 ſays, that dodder which groweth upon tares, being the moſt frequent about London, and wherewith the markets are only in a manner furniſhed, the apothecaries ſhops are ſtored from thence. " The dodder of thyme is brought to us from Leghorn and Turky." *Miller Bot.* p. 187. Here no uſe is made of either: nor are they named in our diſpenſatory.

" Epithymum flos eſt thymi durioris, et ſatureiæ (θυμβρα) ſimilis; capitula " autem habet tenuia et levia, caudas ſpargentia quaſi capillaceas." *Dioſcor.* l. 4. c. 179. p. 316. " Alvum purgat epithymon qui eſt flos e thymo, ſatureiæ " ſimili. Differentia, quod hic herbaceus eſt, alterius thymi albus: (*Dalecamp.* " legit, quod hoc herbaceum eſt, alterum vero thymum album:) quidam hip- " popheon vocant . . . . Quidam aliter epithymum tradunt ſine radice naſ- " ci tenui ſimilitudine pallioli, rubens, (rather tenue ſimilitudine pili). *Plin.* l. 26. c. 8. p. 654. l. 21. " Epithymum *Dioſcoridi* & *Plinio* . . . . Cuſcuta, recentioribus Græcis καυσυθα, quam aliqui androſacen *Dioſcoridis* l. 3. c. 150. (234.) alioqui cadytam *Theophr.* 2. cauſ. 3. & *Plinii* l. 16. c. 44. eſſe volunt. Sed ad orobanchen *Theophr.* 5. cauſ. 22. referri poteſt. *B. P.* 219.

SECT. II.

They are probably detergent in ſome degree, or reſolvent, and ſo deobſtruent. The cuſcuta is called ſplenetic; the epithymum a melanagogue; and both are commended in obſtructions of the hypochondriac viſcera, and atrabiliarious diſeaſes.

" Cuſcuta floret Junio, Julio, Auguſto. *Officin.* Nat. Folia, ſeu herba tota " villoſa, cum floribus, præcipue lino adnata. *Vires.* Splenetica imprimis eſt, " hinc epatica. Calfacit 1. ſiccat 2. abſtergit, ſubaſtringit, aperit, melan- " cholicum humorem corrigit, utilis in ſcabie, ictero nigro, obſtructionibus " epatis ac lienis. *Præp.* Aqua ſtillat. ex tota planta." *Schrod.* 578. It is among the roborantia, ſiccantia, excitantia, antiſcorbutica in rachitide propria, in *Boerh. Lib. de M. M.*

" Epithy-

" Epithymum. *officin.* integra planta. *Vires.* Purgat blande melancholicos " et ſeroſos humores; calfacit et ſiccat 3. *Uſus præcip.* in ſcabie, ulceribus af- " fectibus melancholicis, in hypochrondriorum et lienis paſſionibus, et obſtruc- " tionibus. *Præpar.* Syrupus de epithymo." *Schrod.* 765. Cuſcuta et epithy- " mum purgandi vim adeo debilem obtinent, ut eorum uſus plane obſoleverit. " Rectius inter aperientia medicamenta, quæ affectibus melancholicis et hy- " pochondriacis conveniunt; ſicut et ſcorbuticis, a *Cl. T.* reponuntur." *Geoff.* iii. 388.

For, 1. I have taſted ſeveral ſamples of them, and they were almoſt all inſipid, only a little muſty at firſt; yet they increaſed the ſaliva. They have no proper ſcent: the epithymum creticum of the Dutch ſhops had a little of the flavour of thyme, which may be eaſily given to any of them. Indeed none of them appeared to be recent, and how old they were I know not. " Cuſ- " cutæ flores ſapore inſigniuntur acri." *J. B.*—2. Cuſcutæ haud recentis thea was of a brandy-colour, and almoſt inſipid; but after four days maceration, it ſeemed to have ſomewhat of the flavour of caſtor. It only diluted ſyr. violarum, and reddened very little a tinctura heliotropii. A ſolution of vitriol gave it a dark brown colour, and precipitated ſlowly a little of a greyiſh ſediment: So that it is ſcarcely ſubaſtringent. " Cuſcuta ſeu epithymum eſt planta ſin- " gularis . . . . Saporis acris et ſubaſtringentis." *Geoff.* iii. 386. — 3. Ana- " lyſi chymica ex cuſcutæ recentis floridæ ℔v. prodierunt humores ℔iv. ℥v. ʒiij. gr. xviii. (of which ℥19. were fere inſipidi deinde ſubacidi; 47 (fere) " were intenſely acidi; and the laſt three ounces, humoris intenſe acidi, deinde " ſale volatili urinoſo copioſo imprægnati;) olei adipoſi ℥i. ʒiiiß. carbonis ℥vii. " ʒi unde cinerum ʒx. gr. xii. ac inde ſalis fixi alcali, ℥ß. gr. 2. (ergo terræ " ʒv. gr. xxxiv.) et jactura fuit ℥ij. gr. xviii." Secundum *Geoff.* iii. 387. who adds, " Cuſcuta itaque abundat ſulphure et ſale eſſentiali tartareo ſubaſtrin- " gente." — 4. Mr. *T.* found by experience that the epithymum venetum did not at all purge. " It is rather ſtomachic and aperitive." *Hiſt.* 427. Epithy- " mum dua habet vitia, tarde purgat, et acrimonia ſua nitroſa lancinat ventricu- " lum." Vide *Hoffman* p. 26. " Maſſaria etiam flatulentiam timet." *Ibid.* And — 5. Authors differ as to the doſe. " Tam variat doſis quam in ullo " alio: *Meſue* quidem imponit a ʒv. ad ʒxx. Ego cum Maſſaria, contentus " eſſe velim ℥i. . . . Syrupus de epithymo oportet dari ab ℥iv. ad vi. Ita " enim manifeſte purgat: ℥ij. tumultum cient tantum." *Hoffman* l. c. Some make the doſe to ʒiij. others to iv. vii. xii. &c. Vide *S. Paulli* doſes. " Præſcri- " bitur a pug. i. ad ij. vel. iij." *Geoff.* iii. 388.

In *Lib. de internis affect.* attributed to *Hippocrat.* epithymum is ordered as a purgative. *Fæſ.* p. 536. lin. 53. but in *Lib.* 2. *de morbis mul.* p. 641. l. 32 as a diuretic. " Epithymum potum cum melle deorſum purgat phlegma et bilem " atram, privatim utile melancholicis et inflatis acetabuli menſura, ad ʒiv. cum " melle, ſale, et aceti exiguo." *Dioſcor.* l. iv. c. 179. p. 316.

CYANUS.

CYANUS.

SECT. I.

Cyanus, cyanus minor, battiſecula. *Offic.* Cyanus ſegetum. *B. P.* 273. flore cæruleo. *T.* 446. Cyanos. *J. B.* iii. 21. *R. H.* 321. *Syn.* 198. Cyanos flos. *Dod.* 251. C. vulgaris. *Lob.* 296. *Ger.* 732. C. minor vulgaris. *Park.* 482. C. ſegetum, vulgaris, minor, annuus. *H. Ox.* iii. 134. Papaver heracleum Theophraſti et Dioſcoridis. *Col. Phyt.* 93. Centaurea, calycibus ſerratis; foliis linearibus, infimis dentatis, ſuperioribus integerrimis. *H. Cl.* 422. Common blue-bottles.

It is very common among the corn; flowering in June and all the ſummer, and ſome part of the autumn. Wild it is always blue here: but culture has produced a great variety of colours in this flower: *T.* names 16 or 17 varieties, as different ſpecies. "Si in hortis colatur, non ſolum erit cæruleus, ſed pur-" pureus, remiſſo vel intenſo colore, violaceus item & varius; & rurſus flos " ſimplex vel plenus." *Bauh. Matth.* p. 391.

The leaves and flowers are reckoned medicinal, but ſeldom uſed. It is omitted in *Ph. Edinb.*

" *Plinius* (l. 21. cap. 8.) de veſtium æmulatione cum floribus agens, ait, in " nomine eſt et cyani color: & (cap. 11.) roſam cyanus excipit, cyanum ama-" ranthus. At *Hermolaus* leucoium Dioſcoridis cenſuit: & Cæſalpino ſtruthi-" um apud Theophraſtum ex hoc genere videtur: Lobelius num chondrillæ " ſpecies ſit dubitat." *B. P.* " In Italia violis ſuccedit roſa: huic intervenit " lilium: roſam cyanus excipit: cyanum amarantus. Nam vinca pervinca " ſemper virét, &c." *Plin.* l. 21. c. 11. p. 550. l. 34. " Battiſecula, ſive bap-" tiſecula, officinis olim dicebatur, que vox Hermolao a Latino derivata videtur, " nimirum a batuo, ſive bato, verbo antiquo, quod percutere et tundere ſigni-" ficat, unde Anglicum *beat*; & ſicula, i. e. falx, a ſecando dicta, unde Angli-" cum *ſickle*; a percutiendo et remorando meſſorum falces." *R. H.* 321.

SECT. II.

It is deterſive, deobſtruent, and diuretic; called cooling and aſtringent; and commended internally in obſtructions of the viſcera, jaundice, dropſy, contuſions, &c. alſo in putrid and inflammatory diſeaſes, &c. and externally for ſore eyes, eryſipelatous inflammations, ulcers. *An purgat?*

Officin. Flores. *Vires.* Frigefacit, et ſiccat 2. aſtringit. Utilis in oculorum " inflammationibus, rubedine, lippitudine, doloribus; in hydrope propinant. " *Præpar.* Aqua ſtillatitia, ex floribus." *Schrod.* 579.

For, 1. The herb is of an herbaceous, ſomewhat diſagreeable and bitteriſh taſte; the flowers are more inſipid; but neither has any ſmell. " Sapore eſt " tota planta ſicco, et aliquatenus nauſeoſo, odore nullo excellente." *J. B.* " Analyſi chymica flores cyani præbuerunt plurimum phlegmatis acidi, ſubau-" ſteri, aliquantulum ſpiritus urinoſi, non mediocrem olei ſpiſſi ad inſtar ex-" tracti

" tracti portionem, nonnihil ſalis alcali fixi et terræ. Flores perparum odoris " ſpirant, et ſapore ſubaſtringente donantur: unde ſalem eſſentialem vitriolio- " tartareum obtinere videntur, multo cum oleo permiſtum." *Geoff.* iii. 390. Who analyſed it? Certainly not the Academy: this is not their ſtyle. I know none elſe who would be at the pains; and I cannot help ſuſpecting that all the analyſes whereof he gives ſo compendious an account, (for he ſeems not much to ſtudy brevity,) are imaginary, or conjectural, though he ſeldom owns it.—2. Foliorum et ſummitatum vel herbæ thea is of a ſtraw colour, and herbaceous ſubviſcid taſte, leaving behind it ſomewhat of the reliſh of artichokes. It only dilutes ſyr. violarum et ſol. heliotropii. Oleum tartari makes it ſmell urinous: and ſol. vitrioli gives it a dirty browniſh-black colour; and ſoon precipitates a dark greyiſh ſediment. Hence it appears to be antacid, ammoniacal, and ſubaſtringent. The tea made of the blue floſculi, had nothing of their colour, and made no change on a ſolution of vitriol, but gave an orange tincture to ſpirit of wine. " Flores in ſp. vini, aut etiam aqua communi macera- " ti, ſuo eam colore imbuunt; itemque ſaccharo elegantem colorem communi- " cant, cujus uſus omni periculo vacat." *R. H.* Iteretur experimentum. Do acids turn the flowers red? Yes, vinegar and ſp. vitrioli do it. — 3. The juice, infuſion, but eſpecially the ſimple diſtilled water, called in France (See *Lemery*, *Chomel*, *Geoffroy*) *L'eau de caſſelunette*, are much commended for inflamed, ſore, or weak eyes. " Succus ex flore expreſſus et bene depuratus, reſolvit omnes ocu- " lorum inflammationes, ſæpius hoc pro collyrio utor . . . . dolendum eſt " quod hi flores tam raro uſurpentur, nec in officinis habeantur." *B. Hiſt. Pl.* p. 204. — 4. It is ſaid to be purgative. " Tragus ſays ſeminis ʒß. purges pretty " well." *T. Hiſt.* p. 192. " Tribuunt cyano plerique vim refrigerandi, ſiccan- " di, adſtringendi & repellendi, non ſecus ac plantagini. Ideo uſus eſt aquæ " deſtillatæ in occulorum inflammationibus incipientibus. Eryſipelatis etiam " inſpergitur pulvis ex floribus una cum capitibus factus. (ad putrida ulcera va- " let ſuccus inſtillatus." *R. H.*) " Hoc ſcopo dicunt æſtus febriles reſtinguere, " putredini reſiſtere, contagium compeſcere, et neſcio quæ alia facere Laudant ex- " perimentatores etiam in venenis araneorum, ſcorpionum et aliorum ἰοβόλων, " in palpitatione cordis, in ſuffocatione uterina, &c. Quæ ſi vera ſunt, oportet " cyanus partium ſit heterogenearum. Amaror enim, qui ſatis evidens eſt, ut " et acredo in foliis, non frigidum ſed calidum teſtantur. Vis etiam illa pe- " netrandi et deobſtruendi, manipulo ejus decocto in cerviſia, vinove, in hy- " drope, ictero, in iis qui ex alto delapſi ſunt, aut contuſi, et quacunque de " cauſa ſanguinem concretum intus habentibus, contrarium ſuadet. Sed ne- " que vis purgandi aquas, compertiſſima mihi ex longo uſu, alio tendit." *Hoffman* p. 175. Do cattle eat it? I have not obſerved it eaten. But according to the Pan Suecus (*Amæn. Acad.* ii. p. 257.) comeditur a bobus, capris et ovibus.

It may be uſed in ſubſtance, powdered, to ʒij. in infuſion or decoction to ʒß. The *eau de caſſelunette* is diſtilled from the flowers, cum propriis calycibus, macerated firſt in ſnow water for twenty-four hours, according to *Geoff.* iii. 390.

DICTAM-

DICTAMNUS.

SECT. I.

Dictamnus. Dictamnus creticus. *Offic.* Dictamnus creticus. *B. P.* 222. *Park.* 27. *R. H* 537. *H. Ox.* iii. 357. D. Cretica, seu vera. *J. B.* iii. 253. Dictamnum verum. *Dod.* 281. Dictamnum creticum. *Ger.* 797. Origanum creticum, latifolium, tomentosum; seu dictamnus creticus. *T.* 199. Origanum foliis tomentosis, spicis nutantibus. *H. Cliff.* 304. Dittany of Crete.

It grows in Candy, Sardinia, &c. in gardens; and flowers in July. The leaves are used. This plant was very famous among the ancients, and celebrated by Hippocrates, Aristotle, Theophrastus, Cicero, Virgil, Dioscorides, Pliny, Galen, &c. "Videtur απο τϐ τικτειν, eo quod, ut *Dioscorides* & *Theophrastus* ὀξυτοκον ἐστι cum non modo potum, sed appositum quoque partus defunctos ejiciat: δικταμον," *Theophr.* 9. *Hist.* 16. *B. P.* "Insolens est etymologia et longe petita, ἀπο τϐ τικτειν: vera autem quasi, δικτης θαμνος, frutex Dictæ, montis Cretæ." *Hoffman.* 215.

"Dictamnon Cretæ insulæ proprium est, vi mirabile, et ad plura perutile; sed ad partus mulierum potissimum pollet. Folio pulegio simili constat, nec sapore absimile est. Ramuli tenuiores sunt. Usus foliorum, non ramorum nec fructus est. Valent ad multa, sed præcipue ad difficiles partus mulierum ut dictum est. Aut enim facile posse parere faciunt, aut certe dolores penitus sedant. Dantur bibenda ex aqua. Rara est herba. Locus enim qui fert, exiguus admodum est, eamque capræ depascunt, capescendæ causa voluptatis. Verum etiam quod de telis fertur, affirmant. Capras enim sagitta transfixas, dictamo devorato telum ejicere." (*Theophr. Hist.* l. 9. c. 16. p. 1130.) Canit *Virgil. Aen.* l. 12. v. 411.

"Hic Venus indigno gnati concussa dolore,
"Dictamnum genetrix Cretæa carpit ab Ida,
"Puberibus caulem foliis, et flore comantem
"Purpureo: non illa feris incognita capris
"Gramina, cum tergo volucres hæsere sagittæ."

"Dictamnum (δικταμος ἡ). quod sylvestre pulegium aliquibus appellatur, herba est Cretensis, acris, lævis, pulegio similis: at majoribus lanuginosisque foliis, ac lanosa quadam veluti pube obductis. At neque florem, neque semen profert. Præstat vero omnia quæ sativum pulegium, sed efficacius multo. Nam non potum modo, sed et appositum et suffitum, partus emortuos ejicit. Aiunt et in Creta capras tela quibus ictæ sunt, hujus herbæ pastu excutere, &c. *Dioscorid.* l. 3. c. 37. p. 188. "Fervens et acre gustu." *Plin.* (l. 25. c. 8. p. 638. Vide lin. 22. &c.) Who also says, l. 27. "Dictamnum enim minima portione accendit os. See *Ballon. Obs.* l. 1. c. 13. p. 20.

SECT. II.

It is acrid, aromatic, attenuating, diaphoretic, and diuretic; called uterine and alexipharmic; and commended chiefly in hard labour and other female diſeaſes, alſo in the bites and ſtings of venomous creatures, and (peſtilential) malignant fevers.

" *Officin.* Folia. *Vires.* Uterina imprimis eſt herba et alexipharmaca: calfacit, " ſiccat, attenuat, abſtergit, aperit. *Uſus præcip.* in obſtructis menſibus, in par- " tu accelerando (intrinſecus et extrinſecus) in ictibus venenatis, in ſpiculis " extrahendis." *Schrod.* 583. Acre aromaticum eſt. in *Boerh. lib de M. M.*

For, 1. It is of an acrid aromatic taſte, and ſtrong fragrant ſmell. It does not ſoon ſpoil, though age certainly weakens it; and it is ſo little uſed now, that it can ſeldom be found in the ſhops tolerably recent. " Folia ſunt odo- " ris validi, ſaporis acris." *J. B.* " Folia odore fragrante nec ingrato donata; " ſapore acri, aromatico, fervido . : . . Folia odoris jucundi, ſaporis deurentis, " et acerrimi . . . . Dictamnus oleo eſſentiali uberrimo, cum ſali volatili " conjuncto, donatur, ut ex odore et ſapore conjicere licet." *Geoff.* ii. 272. 3. 4. Here no analyſis is offered. " Odoris ſunt fortis et grati aromatici, ſicut et " ſaporis." *Nucl. Belg.* 102.— 2. It was much commended and uſed by *Hippocrates*; eſpecially in womens diſeaſes (Vide *de Morb. Mul.* l. 1. p. 608. lin. 47. p. 619. l. 7. p. 623. l. 16. and 35. p. 626. l. 26. &c.) and called ſometimes ſimply dictamnus, and ſometimes dictamnus Creticus. " Hoc et menſes de- " trahit, et ſecundas ejicit. Dictamnum Creticum oboli pondere ex aqua po- " tui exhibeto. Quo epoto ſi ſecundas ejicere non potes, &c." *(Lib. de Nat. Mul.* p. 571. l. 3.) and ſince him by all the ancients. " Tria habet dictamnus " Cretica valde inſignia. 1. Extrahit infixa corpori, non impoſita tantum, " ſed ſucco etiam exhibito, ſimulque vulnus ſolidat. Hoc docuerunt vel ca- " præ, vel cervi, vel hirci. *Ariſt.* 9. *Hiſt.* 6. *Plutarch in Gryllo. Plin.* l. 2. c. 8. " and l. 8. c. 27. *Bellon.* 1. *Obſ.* 13. 2. Partum mirifice accelerat ſimulque " dolores lenit. 3. Venenis non minus quam theriaca reſiſtit: hinc uſus ip- " ſius in peſte." *Hoffman.* 126.

SECT. III.

It may be given in ſubſtance to ʒi. in infuſion to ʒij. It is an ingredient in the mithridatium, theriaca, and diaſcordium; in which laſt it is omitted in the *Ph. Edin.* ed. 1744. though preferable to ſeveral of thoſe retained.

" Exhibetur ejus pulvis a ʒß. ad ʒi; infuſum vero in vino a ʒi. ad ʒß." *Geoff.* ii. 274.

LECTURE

LECTURE LVII.

ELATINE.

SECT. I.

ELatine, veronica fœmina. *Offic.* Elatine, folio ſubrotundo. *B. P.* 252. *Park.* 553. Elatine mas, folio ſubrotundo. *J. B.* iii. 372. Veronica fœmina. *Dod.* 42. Veron. fœmina *Fuchſii*, ſive elatine. *Ger.* 625. Linaria, hirſuto folio ſubrotundo, flore ex herbido flaveſcente. *H. Ox.* ii. 503. Linaria, elatine dicta, folio ſubrotundo. *R. H.* 759. *Syn.* 282. Linaria ſegetum, nummulariæ folio villoſo. *T.* 169. Antirrhinum foliis alternis ovatis. *H. Cliff.* 353. Round-leaved female fluellin, or ſpeedwell.

It grows among the corn, flowering in July or Auguſt, in England. "It grows in corn fields, ſeldom flowering till the corn is cut down. There "is another ſpecies of elatine which is as frequent as the laſt, and differs from "it only in the leaves." *Miller's Bot.* 184. This other ſpecies is the elatine, folio acuminato, in baſi auriculato, flore-luteo. *B. P.* 253. Elatine fœmina, folio anguloſo. *J. B.* iii. 372. E. altera. *Ger.* 625. E. folio acuminato. *Park.* 553. Linaria hirſuto folio acuminato, in baſi auriculato. *H. Ox.* ii. 503. L. Elatine dicta, folio acuminato. *R. H.* 759. *Syn.* 282. L. Segetum, nummulariæ folio, aurito et villoſo; flore luteo. *T.* 169. Antirrhinum, foliis alternis, haſtatis. *H. Cliff.* 353. Sharp-pointed female fluellin.——"Inter ſegetes, et in "arvis demeſſa ſegete, cum priore, a qua parum differt." *R. Syn.*

"Elatine folia habet helxinæ, at minora rotundioraque, piloſa: ramos tenues, "dodrantales, quinos ſenoſve, a radice ſtatim foliis refertos guſtu acerbis. "Naſcitur in ſegetibus et cultis. Folia cum polenta impoſita, inflammatis "fluxioneque infeſtatis oculis auxiliantur. Cocta vero herba ſorbitionis uſu "dyſenteriam ſiſtit." *Dioſcor.* l. 4. c. 40. p. 258. And this is all he has of it. Of the helxine he ſays, "Foliis eſt hederæ at minoribus. *Ibid.* c. 39. Vide *Plin. l.* 27. c. 9.

I find it not in Hoffman, Schroder, (except the elatine Brunf. which is hedera terreſtris) Nucl. Belg. Quincy Ph. Leidenſis, &c. nor is it marked as medicinal in Boerh. Index. Yet it has a place in the *London M. M.*

"Elatine. Sunt elatines folio ſubrotundo, aut etiam folio acuminato. *C. B.* "pin. folia . . . . Amaricante ſapore." *Boecleri Cyn. M. M.* contin. 2ᵃ. p. 271. But the firſt only is in the *Ph. Lond.* viz. folia.

SECT. II.

It is bitter, and probably an attenuating diuretic; called vulnerary and aſtringent: and is recommended for foul ulcers, ſcrophulæ, leproſy, cancers, both internally and externally uſed; alſo for the gout, dropſy, dyſentery, &c.

" Elatine *Dioſcoridis*; veronica fœmina *Fuchſii*, adſtrictoriæ non modo facul-
" tatis, merito dyſentericis, tumoribuſque fervidis prodeſt; verum etiam tanti
" fit hodie ad cancros, carcinomata; malique humoris ulcera, ut eventus ſu-
" peret, aut temeret fidem. Naſum qui decreverant abſcindere perdocti medi-
" ci complures, præceperantque ejuſdem ſententiæ chirurgis valde exercitatis
" id faciendum, quidam miſellus barbitonſor, qui de quopiam ſuo hero exi-
" mio medico hanc dotem didiciſſet, diſſuaſit: hujus litu et potu effecit, ut
" nec naſus abſcindendus foret, et ut reliquo corpori in lepram prono optime
" eſſet: amaricant folia aſtringuntque, ſiccitate non exaſperante." *Lob. Adv.* p. 197. " Succus herbæ expreſſus, ejuſve aqua deſtillata, tum intro aſſumpta,
" tum exterius applicata, ulcera ſerpentia et cancroſa cohibet, et perfecte ſanat." *R. Syn.* 283.

" Linaria ſegetum, nummulariæ folio villoſo." *Inſt.* 2. *b.* The leaves are very bitter, a little ſtyptic, and ſmell ſomewhat oily. They redden but little the blue paper: whence it may be conjectured that their ſalt comes very near to the natural ſalt of the earth, united to much ſulphur and earth. It is vulnerary, ſweetning, deterſive: it purifies the blood, and repairs the balſam of life, which conſiſts in a ſulphur modified by an acrid ſalt. Cæſalpin valued it for the king's-evil and leproſy. For the cancer, gout, tetters, leproſy, and dropſy, ſucci ℥iij. or aquæ ſtillat. ℥vi. muſt be taken twice a day. A tincture is drawn with ſp. vini; or an extract prepared, the doſe whereof is ʒi. An ointment made of the expreſſed juice of the leaves, firſt macerated 24 hours in white wine, and hog's lard is good for ulcers, hæmorrhoids, ſcrophulæ, and all the diſeaſes of the ſkin. *T. Hiſt.* p. iii. He quotes alſo from Pena and Lobel. And *Geoffroy* almoſt only tranſlates him, except in what follows.

" Analyſi chymica ex totius plantæ recentis ℔v. prodierunt humoris (primo
" ſubacidi, dein magis ac magis acidi, tum intenſe acidi, the laſt ʒix. being
" only impregnated ſale vol. urinoſo copioſo) ℔iv. ℥i. ʒijß. olei ʒvi. gr. xlii.
" carbonis ℥ix gr. xlii. unde cinerum ℥vi. ʒiß. ac inde ſalis fixi ſalſi ʒijß. (er-
" go terræ ℥v. ʒvii.) et jactura fuit ℥iv. ʒvi. gr. xviii." (*N. B.* Here are wanting gr. vi. of ℔v.) " Elatines folia intenſe amara ſunt, ſubaſtringentia, et ali-
" quid oleoſi ſpirant. Salem eſſentialem continere videntur tartareo-alumino-
" ſum, mediocri olei portione involutum. Summe vulneraria eſt, temperans
" et detergens, aperit et reſolvit. Ejus infuſum, decoctum, vel aqua deſtillata
" uſurpari ſolent ad ℥iv. vel vi. Succus vero ab ℥iij. ad ℥v. bis terve de die.
" Laudatur in cancro, podagra, &c. (as in *T.* but he leaves out the tincture)
" . . . . Utiliter quoque a nonnullis in enematum decoctis adverſus alvi pro-
" fluvia et dyſenteriam uſurpatur." *M. M.* iii. 420.

I have not had occaſion yet to examine or make any experiments with this ſpecies. But probably it does not differ from the elatine fœmina folio anguloſo. *J. B.* in virtues. For, 1. It is of a nauſeous, bitter taſte, and rancid ſmell; I can diſcover no ſtypticity in it. — 2. Herbæ thea is of a browniſh yellow colour, perhaps taſtes like the herb, and ſmells alſo rancid, ſomewhat like old linſeed oil. It reddens a little the ſolutio heliotropii. A ſolution of vitriol does not make it black, but more opake; and ol. tartari ſomewhat more yellow. The mixture with vitriol precipitates little; and ſpirit. vitrioli turns it only a little paler. In a word, the change made on this infuſion by theſe mixtures is but ſmall. Hence I think it not improbable that this plant is

emollient, detergent, diuretic, and, if given in ſuch quantities as Mr. *Geoffroy* ſays the other is, purgative. Would not ſucci ℥iv. vomit?

The *mell elatines* was firſt introduced into the *London Diſpenſatory* in 1721. and it is retained in the newly reformed one: it is made ex ſucci elatines depurati m. ℔iv. Mellis deſpumati P. ℔iv. coctis ad debitam ſpiſſitudinem. Surely if in making it, the apothecary picks the leaves from the ſtalks, he obeys the college to his own coſt, and little to the advantage of the medicine. "I have never known this (viz. mel elatines) uſed in any intention what-"ever." *James Pharm. univerſ.* p. 704. And Dr. *Hill* ſays elatine is little uſed at preſent. "Honey of fluellin is very rarely made uſe of, and not "often kept in the ſhops." *New Diſpenſatory*, p. 447.

EQUISETUM.

SECT. I.

Equiſetum, cauda equina, hippuris. *Offic.* Equiſetum paluſtre, longioribus ſetis. *B. P.* 15. *T.* 533. E. majus aquaticum. *J. B.* iii. 728. *H. Ox.* iii. 621. E. majus. *Ger.* 1113. *R. H.* 128. *Syn.* 130. E. majus paluſtre. *Park.* 1200. Hippuris major. *Dod.* 73. Equiſetum fluviatile. *Fl. Lap.* 310. Cauda equina et equiſetum majus. *Offic. Dale* 62. Great marſh or water horſetail.—*Vel* equiſetum arvenſe longioribus ſetis. *B. P.* 16. *T.* 533. *Park.* 1202. *R. H.* 128. *Syn.* 130. *H. Ox.* iii. 621. E. minus terreſtre. *J. B.* iii. 730. E. ſegetale. *Ger.* 1114. Hippuris minor. *Dod.* 73. E. arvinſe. *Fl. Lapp.* 309. Cauda equina minor, et equiſetum minus, *offic. Dale.* 62. Corn horſetail. "Va-"rii eſt generis. Eſt enim equiſetum paluſtre varium, eſt ſylvaticum, eſt pra-"tenſe, eſt denique arvenſe. Et hæc etſi viribus conveniant, attamen uſuale "magis eſt pratenſe. Dicitur equiſetum longiſſimis ſetis. *B. P.* No. 8." *Schrod.* 586. The herb of any of theſe may be uſed.

Theſe are generally thought to be the hippuris, and hippuris altera *Dioſcor.* l. 4. c. 46. & 47. p. 260. Vide *Bod. in Theophr.* p. 458.

SECT. II.

It is called aſtringent, and vulnerary; and commended in wounds and ulcers of the guts, reins and bladder, ſcabie veſicæ, &c. in powder, in decoction, plaiſter, &c. alſo in fluxes and hæmorrhages. But I know not what it is good for, if it be good for any thing in medicine.

"Vulnerarium eſt, frig. ſic. 2. inſpiſſat, aſtringit. Uſus præcip. in hæ-"morrhagiis ſiſtendis, in exulceratione et vulneratione renum et veſicæ, inter-"aneorum tenuium, &c. *Præpar.* Aqua ſtillatitia." *Schrod.* 586.

1. It is of an herbaceous taſte, and as it were drying; and of a faint ſmell. It is neither bitter, acrid, nor aſtringent; at leaſt the corn horſetail: nor does tea made of it blacken much a ſolution of vitriol. "Tota planta aſperſa (aſpera) "eſt ſapore impenſe ſiccante." *J. B.* iii. 730. "Equiſetum majus aquaticum. *J. B.* iii. 729. Preſſe is of an herbaceous, ſaltiſh, deterſive taſte, and ſcarce

"t

" at all reddens the blue paper . . . . By a chymical analyſis, it yields ſe-
" veral acid liquors, little oil, no volatile ſalt, a little of an urinous ſpirit:
" its fixed ſalt does not eaſily diſſolve in the air; neither gives it an orange
" colour to a ſolution of corroſive ſublimat." *T. Hiſt.* p. 267. Here are " *plu-*
" *ſieurs liqueurs acides.*" And the regiſters of the R. Acad. are quoted. " Ana-
" lyſi chymica ex herbæ equiſeti majoris ℔v. prodierunt humoris limpidi, odo-
" ris et ſaporis herbacei, ſubſalſi ℔iv. ℥iij. humoris limpidi ſubſalſi, et obſcure
" auſteri ℥i. gr. xlviii. humoris rufeſcentis turbidi, ſale vol. urinoſo copioſo im-
" prægnati, ʒxv. gr. liv. olei ʒiij. carbonis ℥vii. ʒij. unde cinerum ℥iijß.
" ℥iijß. ac inde ſalis fixi ſalſi ʒiv. gr. xv. et jactura in diſtillatione fuit ℥ij. ʒi.
" gr. lxvi. Equiſetum ſaporem herbaceum ſubſalſum refert: chartam cæru-
" leam vix mutat. Sale ammoniacali donari videtur, cum multa terra ad-
" ſtringente, et exigua olei portione permixto." *Geoff.* iii. 434. Here is no acid liquor. And *T.* gives it a ſalt like that of coral mixed with a little ſal ammoniac only: but here is an aſtringent earth without an acid.—2. It is ſaid to be hurtful to black cattle. " Notatu dignum quod Pechlinus (obſ. medicis) re-
" fert, equiſetum aſtringentem et aluminoſam herbam, ubi inter gramina a bo-
" bus decerpitur, ſucco fermentante alvum vehementer turbare, pinguedinem-
" que vel detrahere, vel prohibere." *Geoff.* iii. 436. though it has not ſuch
" effect on the rein-deer. Goats eat it; but ſheep ſeldom. Vide *Pan. Suec.*
Amæn. Acad. ii. p. 261.

" Obtuli circa autumnum redeuntibus ex longo itinere rangiferis faſciculum
" fœni, et obſervavi eos hanc plantam (equiſetum fluviatile), ſeligere et adſu-
" mere, et reliqua fere intacta relinquere." *Fl. L.* p. 310. Hoc (viz. equiſe-
" tum idem) rura noſtra in cibum aſſumunt, jejunii quadrageſimalis tempore.
" Etenim illud prius elixant, mox farina ſuperſpergunt, et oleo in ſartagine
" frigunt, manduntque piſcium vice. Ex quo cibo alvus quandoque eorum
" adeo conſtringitur, et conſtipatur, ut in coli cruciatum facile incurrant."
Matth. p. 726. Surely this could not be the effect of its aſtringency. Claret wine is much more aſtringent, and yet how liberally is it guzzled down without ſuch conſequences. Yet — 3. Horſetail is commended much in the dyſentery, hæmoptoes, ulcers of the lungs, phthiſis, malignant fevers, &c. " In ἀτονια
" viſcerum emplaſtrum ex eo factum mirifice confortat. Ita quoque oleo ad-
" ſtringenti incoctum et illitum toti abdomini. In diuturnis febribus, etiam
" malignis, miracula feciſſe cum aliis comperi." *Hoffman.* p. 218.

" Alios ejus exhibendi modos contra vomitum ſanguinis, et dolores ventri-
" culi, contra rupturas, contra calculum, urinæ ſtillicidium, &c. Vide apud
C. Bauhinum." *R. H.* 128. viz. *Theat. Col.* 252, 3, 4. where are plenty of authorities for its wonderful virtues. " Scabiei Veſicæ (ſays he, from Amatus
" in Dioſcor.) malo intolerabili medetur, et bilioſum vomitum conſtringit."
" *Ibid.* col. 253. Diutina experientia compertum eſt, inquit *Ammonius*, (*Medic.*
" *herbar.* p. 95.) ſcabiei veſicæ mederi. Nam unico hoc medicamine teſta-
" tur lithotomum inſignem hanc ſcabiem penitus profligaſſe, decoctiones illius
" ægroto propinandas porrigendo." *Geoff.* iii. 436. *Joh. Agricolæ Ammonii* medicinæ herbariæ libri duo were printed *Baſiliæ* 1539. in 8vo. *Lind.* 513. in 12mo. *Seguier.* p. 4.

SECT.

SECT. III.

It has been given in powder to ʒi. in decoction to ʒij. or ʒß. the juice to ʒij. It is one of the uſeleſs ingredients of our emplaſtrum defenſivum.

ERYSIMUM.

SECT. I.

Eryſimum, irio. *Offic.* Eryſimum vulgare. *B. P.* 100. *T.* 228. *H. Ox.* ii. 218. Eryſimum, *Tragi*, floſculis luteis, juxta muros proveniens. *J. B.* ii. 863. E. Dioſcoridis Lobelii. *Ger.* 254. E. irio prima. *Tab. Ic.* 448. Irio, ſive eryſimum. *Dod.* 714. *Lob.* 103. I. ſive eryſimum *Dioſcoridis Adv.* 69. I. ſive eryſimum vulgare. *Park.* 833. Eruca, ſiliqua cauli appreſſa; eryſimum dicta. *R. H.* 810. Eruca hirſuta, ſiliqua cauli appreſſa; eryſimum dicta. *R. Syn.* 298. Eryſimum, ſiliquis ſcapo appreſſis. *H. Cliff.* 337. Hedge-muſtard.

It grows by the way ſides, walls, and rubbiſhy places, flowering all the ſummer. The herb is uſed. But the ſeed ſeems to have been the part chiefly uſed by the ancients. In Dioſcorides, Galen, Paulus, the ἐρυσιμον recommended is the ſeed. In Hippocrates, the eryſimon, and ἐρισυμα καρπος are commonly the ſame thing. *Officin.* Semen ac herba. *Schrod.* 587. *Dale* 203. *Ph. Lond.* ed. 1682. But *edit.* 1721. has herba only; and in the laſt edition the herb is ſent after the ſeed; and moſt juſtly.

" Eryſimon circa urbes, domorum areas, hortoſque naſcitur, foliis erucæ ſyl-
" veſtris, cauliculis in lori modum ſequacibus et flexilibus, floribus luteis, ſili-
" quis in cacumine corniculorum figura et gracilibus, uti fœno græco, quibus
" exigua concluduntur ſemina, naſturtii ſimilia, fervidoque guſtu." *Dioſcor.* l. 2. c. 188. p. 153. The etymons I think ſomewhat ſtrained. Vide *B. P.* and *Bod.* in *Theophr.* p. 921.

SECT. II.

The herb agrees in virtues with burſa paſtoris; and the ſeed with ſemen naſturtii. It is ſaid to be a pectoral; and is commended in coughs, hoarſeneſs, aſthma, &c.

" Calfacit et ſiccat 3. attenuat, aperit, expectorat. *Uſus præcip.* in mucila-
" gine contumaci pulmonum, atque tuſſi chronica. Extrinſecus in cancro non
" exulcerato, tumoribuſque renitentibus mammarum. *Præp.* Syrupus de ery-
" ſimo *Lobelii.*" *Schrod.* 587. Herba antacida et acris; ſemen ſtimulans aromaticum, alcaleſcens, et antiſcorbuticum acrius, in *B. Lib. de M. M.*

The leaves and flowering tops taſte like the leaves and tops of ſhepherd's purſe: the ſeed is more biting. It has little ſmell. It is alcaleſcent, and its acrimony volatile. " Radix acris et rapæ ſapore: folia ſapore oleraceo:
" ſemen fervidum." *J. B.* " It has an herbaceous, ſomewhat ſaltiſh and

" glutinous taſte; it reddens conſiderably *(aſſez)* the blue paper; hence ſeems " to contain a ſalt reſembling ſal ammoniac, &c. *T. Hiſt.* p. 19. The virtues are commonly tranſcribed from the ancients.

" Semina . . . cum melle delincta, contra thoracis fluxiones, purulentas exe- " crationes, tuſſes, icterum, et iſchiadem efficacia ſunt. Bibitur et ſemen con- " tra venena . . . Cæterum ad eclegmata redditur mitius, et accomodatius, ſi " aqua maceratum torreatur, aut linteo illigatum, ſubactâque farinâ oblitum in- " aſſetur." *Dioſcor.* l. c. Who commends it alſo outwardly for occult cancers, parotides, inflammationes teſtium et mammarum. In a word, folia rapæ are every way as good as folia eryſimi; or, if you pleaſe, folia braſſicæ will do as well.

" Analyſi chymica ex foliorum et ſummitatum eryſimi vulgaris ℔v. pro- " dierunt humoris (all alcaline or urinous) ℔iv. ℥vi. ℥vij. gr. lxvi. olei ʒvi. gr. xlviii. carbonis ℥iv. ʒv. unde cinerum ℥ij. ʒv. gr. xlii. ac inde ſalis fixi mere " alcali ℥i. gr. xviii. (ergo terræ ℥i. ʒv. gr. xxiv.) et jactura fuit ℥iijß. gr. xxx." Secundum *Geoff.* iii. 445. who adds " Foliorum ſapor herbaceus eſt, " ſubſalſus, et aliquantiſper glutinoſus. Chartam cæruleam ſuccus rubro co- " lore tingit, licet analyſi chymica parum acidi (not a word of acid in it) præ- " beat. Salem eſſentialem contineri videtur ammoniacalem, cum multo " phlegmate, ſulphure, et terra involutum." *Videatur!*

" Eryſimi decocto multos colico dolore laborantes curavit *Riverius*, quod " etiam ex vino efficaciſſimum eſt remedium." *R. H.*

EUPATORIUM.

SECT. I.

Eupatorium cannabinum. *Offic.* Eupatorium. *Avicennæ vulgo.* Eupatorium cannabinum *B. P.* 320. *T.* 455. *Park.* 595. *R. H.* 293. *Syn.* 179. E. adulterinum. *J. B.* ii. 1065. E. cannabinum mas. *Ger.* 711. E. cannabinum vulgare foliis trifidis, profunde dentatis. *H. Ox.* iii. 97. Vulgare hepatorium *Dod.* 28. Eupatorium, foliis digitatis. *H. Cliff.* 396. Dutch or hemp agrimony.

It grows by ditches, river ſides, &c. flowering in July. The herb, or leaves and flowers are uſed, but ſeldom. It is uncertain whether it was known to the ancients or not. It is neither the eupatorium of the *Greeks*, nor, (which is the ſame) of *Avicenna*. It is called herba S. Kunigundis, by *Trag.* & *Tab. B. P.*

SECT. II.

It is detergent, deobſtruent, diuretic and ſubaſtringent alſo; called vulnerary, and hepatic; and is commended internally in obſtructions of the viſcera, jaundice, dropſy, ſcurvy, &c. and outwardly for ſcorbutic ulcers, ſwellings of the legs, and the like.

" *Officin.*

" *Officin.* Flores, & folia, ſed raro. *Vires.* Calfacit & ſiccat. Saporis eſt " amariuſculi, attenuat, aperit, ſubaſtringit. Epatica eſt et vulneraria. *Uſus* " *præcip.* in cachexia, catarrhis, & tuſſi, menſibus retentis. Extrinſecus e " nobiliſſimis eſt vulnerariis (ut & intrinſecus). Menſes ciet, balneatione, &c. " *Præp.* 1. Aqua, ex fol. & floribus. 2. Trochiſci de eupat. A." *Schred.* p. 587.

1. It is of a pretty bitter and ſubaſtringent taſte, and ſomewhat aromatic ſmell. " Caulis gratum & aromaticum odorem, cum inciditur ſpirat; folia " ſunt ſapore amaro; & radix non abſimili cum foliis guſtu." *J. B.* " The " leaves are very bitter, and do not redden the blue paper: it is very pro- " bable that the natural ſalt of the earth has undergone no other change in it " almoſt, but of being united to much ſulphur and earth." *T. Hiſt.* p. 194. " Tota planta odorem habet gratum & fortem, ſaporem amarum acrem; ra- " dix fortiorem habet odorem." *Nucl. Belg.* 100.—2. Foliorum thea is pretty deeply tinctured, like old Canary; is pretty bitter, and ſomewhat rough to the taſte, and ſmells ſomewhat aromatic: it reddens very little, yet obſervably, the blue paper: ſolutio vitrioli turns it inſtantly opake, and to a greeniſh-ſooty-black colour, precipitating ſoon and plentifully. Ol. tartari made it darker, greeniſh, and leſs tranſparent, and it ſmelled ſomewhat urinous: and mixed with ſpirit. vitrioli, the infuſion became paler, and more tranſparent.—3. *Geſner* found the roots emetic; *Chomel*, that a decoction of them neither purged nor vomited hydropic perſons. " Eupatorii aquatici, vel Avicennæ " quorundam, radicis fibras (earum pugillum, *R. H.*) in vino nuper decoxi, " bibi colatum, unde per horam poſt alvus urinaque copioſe motæ ſunt, & " vomitus poſtea duodecies fere, pituita quam plurima evacuata, multo tutius " et facilius quam ab helleboro fiat." *E. Geſner. Epiſt.* p. 63. *T. Hiſt.* p. 193. " Nihilominus tamen D. Chomel refert, in plant. uſualium hiſtoria, decoctum " radicum ℥j. in vini ℥viii. hydropicis (ſe?) propinaſſe, abſque ulla per vomi- " tum vel ſeceſſum evacuatione. Unde quæſo horum experimentorum di- " verſitas?" *Geoff.* iii. 454.—4. It is not a little commended for internal, as well as external ulcers, rheums, cachexies, agues, chloroſes, diſeaſes of the ſkin, &c. " In Belgio ruſtici feliciter icterum curant, hujus plantæ decocto. " *D. Regemorter. in M. S.* In Noſocomio cuidam inteſtina corroſa, ita ut per " foramina ſtercora exirent, jam prope deſperato, coaluerunt decocto eupa- " torii cannabini cum vino parato, & poto & ulceribus infuſo." *Velſch. Obſ.* 44. *R. H.* " Externe folia & ſummitates floridæ in vino cocta, & tumoribus " œdematoſis admota, eos reſolvunt; ſcroti præſertim tumores aquoſos & hy- " drocelem abſque punctione ſanant." *Geoff.* iii. 454.

" Analyſi chymica ex foliorum recentium ℔ v. prodierunt humoris ℔ iv. " ℥ix. ʒij. gr. xii. (all obſcurè acidi, or manifeſtè acidi, except the laſt ʒx.) " Salis volatilis urinoſi ʒj. gr. viii. Olei ℥ij. gr. xxx. Carbonis ℥iv. ʒv. unde " cinerum ℥j. ʒvi. gr. xxiv. ac inde ſalis fixi ſalſi ʒiv. gr. lx. (ergo terræ " ℥j. ʒiß.) & jactura fuit ℥ijß. gr. xii." according to *Geoff.* iii. 453. who adds, " Folia amara ſunt, chartam cæruleam non mutant. Salem eſſentialem natro " ſimilem continere videntur cum multo ſulphure, & terra copioſa permiſtum. " Hepaticum eſt, aperiens & vulnerarium, &c. . . Succus foliorum ad ℥iv. " præſcribitur. Extractum ex ſucco paratum ad ʒj. exhibetur." *T.* gives

only ʒij. of the juice, vide *Boerh. Hiſt. Plantarum* dictam p. 175. where it is called *ruſticorum panacea.*

EUPHRASIA.

SECT. I.

Euphraſia, euphragia *offic.* Euphraſia *officinarum*, *B. P.* 233. *T.* 174. *H. Ox.* iii. 430. Euphraſia, *Dod.* 54. *J. B.* iii. 452. *Ger.* 663. *R. H.* 771. *Syn.* 284. Euphragia vulgaris, *Park.* 1328. Euphraſia, caule ramoſo, foliis ovatis, acute dentatis, *Fl. Lap.* 204. *H. Cliff.* 325. Eyebright.

It grows in plenty in paſture grounds, flowering from midſummer to autumn. The herb whilſt in flower is uſed. The name ſounds as if it were derived from εὐφροσυνη, though it ſeems not to have been known to the antients. "Euphraſiam olim εὐφροσυνη dictam aliqui volunt, eo quod oculos, eorum caliginem diſcutiendo, delectet: hinc nonnullis ophthalmica & ocularia: quæ cum paulo ſupra ducentos annos inventa fuerit, veteribus indicta videtur. Forte hæc vox a Bugloſſa mutuata, quæ etiam εὐφροσυνη dicitur; quod eo modo quo Bugloſſa in vinum conjecta, animi lætitiam faciat, ſic & euphraſia oculos juvet." *B. P.* "Factam eſſe vocem ἀπο της εὐφροσυνης, neſcio an auſim dicere. Veteribus ignotam fuiſſe concedo; ſed longe vetuſtiorem 200 annis. Clarigavit illam Matthæus Sylvaticus, qui vixit circa annum Chriſti 1320. Arnaldus Villanovanus, author eſt vini euphraſiati tantopere celebrati." *Hoffman.* p. 225. The paſſage cited from *B. P.* is alſo in his Phytopinax, where his words are, "Apud veteres nil de hac (euphraſia) invenitur, cum ea a ducentis tantum annis, vel paulo plus innotuerit." *Phytop.* p. 442. The Phytopinax was printed *Baſiliæ* 1596, after the author had 20 years applied himſelf to botany. *M. Sylvaticus* died about 1340. *Freind Hiſt.* ii. 264. So *Bauhinus* may have written this in 1580; from which deducing 200, it is but about 40 years after *Sylvaticus*'s death, which perhaps is the paulo plus, added by *Bauhinus.* However *Arnoldus de Villa Nova*, is ſomewhat older than *Sylvaticus*, for he died before the year 1313. *Freind Hiſt.* ii. 256. How long before him the euphraſia was in repute for diſeaſes of the eyes I know not; but in *Gordon's Lilium Medicinæ* (publiſhed in 1305) among the medicines for the eyes, euphragia is one; and uſed both outwardly, in a compound diſtilled water, and inwardly in a ſyrup. *Fol.* 146. a.

I cannot but here obſerve that this *Arnoldus de Villa Nova*, was one of the greateſt men of his age, not only a famous phyſician and chymiſt, but divine alſo, who had the courage to oppoſe not a few of the corruptions of the then clergy. On which account the faculty of theology at Paris, in 1309, took him to taſk. "He had vented his opinions a little too freely at Paris and in Arragon, particularly ſome, which reflected upon the monks and the maſs: which ſo incenſed the clergy, that the faculty of theology at Paris, in 1309, condemned 15 poſitions, which he had advanced; one of which was, that the works of mercy and medicine were more acceptable to God, than the ſacrifice of the altar. Upon this account, and hearing at the ſame time that the Inquiſition was proceeding againſt *P. de Apono*, he retired to *Frederick*

" *derick* of *Arragon*, King of *Sicily* and *Naples*." Vide *Fr. Hiſt.* ii. 251—257. He deſcribes many chymical medicines, and among the reſt the aqua euphragiæ, aqua vitæ, &c. in his *Breviarium Practicæ:* and in his book *De Vinis*, he highly commends vinum euphragiatum. Euphragia is not mentioned in the *Schola Salernitana*, compiled about the year 1100.

SECT. II.

It is an attenuating, antiſeptic, and ſubaſtringent vulnerary; called cephalic: and is recommended chiefly, for dim, weak, or ſore eyes, and a bad memory; by ſome alſo for the jaundice.

" Ophthalmica eſt, & cephalica, calfacit, & ſiccat 2°. aſtringit, diſcutit, ſa-
" poris ſubacris. *Uſus præcip.* in oculorum ſuffuſionibus, caligine, memoriæ
" debilitate. *Præp.* 1. Conſerva, ex tota herba cum floribus. 2. Aqua, ex
" integra planta *Julio* collecta. 3. Vinum nonnullis uſitatum eſt: fit infu-
" ſione ſummitatum pro potu ordinario." *Schrod.* 588.

For 1. It is of a pretty bitter, and ſubaſtringent taſte, without any proper ſmell. " Folia ſunt ſaporis pinguis & ſubamari." *J. B.* " It is very bitter,
" and reddens a-little the blue paper; whence we may conjecture that the ſal
" ammoniac, though envelop'd in much ſulphur and earth, yet predominates
" in this plant." *T. Hiſt.* p. 194. — 2. Summitatum thea is of a deep old canary colour, not quite fine, pretty bitter, ſcarcely aſtringent, and of a freſh ſmell. It turns ſolutio heliotropii to a yellowiſh-red colour: oleum tartari makes it more opake, ſaffron-coloured, and a little urinous-ſcented: and with ſolutio vitrioli it becomes opake, of a dark greeniſh-brown, and precipitates ſlowly. — 3. It has been long reckoned a ſpecific ophthalmic; and commended for dim, weak and watery eyes, for inflamed and ſore eyes, for cataracts, &c. yea it is ſaid to make old eyes become young again, and the blind to ſee. " *F. Hildanus*, *Cent. Epiſt.* 103. tantam eſſe, ait, euphraſiæ in imbe-
" cillitate viſus vim atque efficaciam, ut ejus uſu ſeptuagenarios quoſdam,
" propter vigilias & ſtudia plurima amiſſo viſu, in decrepita iſta ætate, eum
" recuperaſſe obſervaverit." *R. H.* 772. " ℞ Macis ʒß. euphraſiæ ʒij. f. pulv.
" ſubtiliſſimus. Doſis, factis debitis evacuationibus, ʒij. Valet ad Scotomiam
" & imagines. *Maroidus* pulverem Doctoris *Helidæi* appellat. *Dodonæus* ſe-
" men fæniculi & ſaccharum addit. *Fuchſius* in ſuffuſionibus & cataractis
" commendat." *Ibid.* " *Arnoldus* auctor eſt fieri ex eufragia vinum vinde-
" miæ tempore, cujus uſu, ſenum etiam oculi rejuveneſcere feruntur, auferri-
" que omne oculorum impedimentum, viſuſque defectionem, præſertim pi-
" tuita, crudiſque humoribus redundantibus. Ego certe, inquit *Tragus*, Ar-
" gentinenſem euphraſiam, morbo arquato utiliſſimam comperi, vino decoctam
" ac calidam ægro propinatam." *J. B.* " Euphragiam decoctam in vino,
" maximopere contra icterum flavum utilem deprehendi, caſu a me inventam,
" id quod nemo adhuc obſervavit." *Hoffman.* in *Schrod. Mang.* p. 412. *Is* Tragus *nobody?*

" Vino autem, cui multa euphraſia injecta fuerit, quantumvis magnopere
" commendetur a multis, non perinde fidendum: ut cujus potu tantum tri-
" meſtri in Helvetia uſum ſocium et commilitonem noſtrum, meminimus pene

" ambobus orbatum oculis, & fluxionibus modo non oppreſſum: quum dun-
" taxat antea levi cataphora & lachrymaliunculis laboraret. Quare pulvere,
" aut decocto, citra vinum tutius utetur quis." *Lob. Adv.* 210.

" Analyſi chymica, ex totius plantæ floridæ recentis ℔ v. dempta radice,
" diſtillaverunt humoris, fere inodori, ſaporis herbacei, obſcurè acidi, dein
" manifeſte acidi magis ac magis, ac tandem auſteri, ℔ iv. ℥j. ʒv. gr. lx.
" humoris ſale vol. urin. copioſo impregnati ℥ij. gr. xxiv. olei ʒix. gr. lx.
" carbonis ℥vi. ʒv. unde cinerum ℥j. ʒvi gr. xxiv. indeque ſalis xxi alcali ʒiv.
" gr. l. (ergo terræ ʒx. gr. xlvi.) & jactura fuit ℥iv. ʒiij." Secundum *Geoff.* iii. 455. who adds, " Folia amara ſunt: eorum ſuccus chartam cæruleam
" colore purpureo leviter tingit. Salem eſſentialem obtinent tartareo-ammo-
" niacalem, cum ſulphure copioſo, & multa terra conjunctum."

SECT. III.

It may be given in powder to ʒj. or ʒij. in infuſion to ℥ß. the juice to ℥j. or ℥ij. and repeated once or twice a day: the aqua ſtillat. ad libitum. The herb bruiſed is recommended to be applied to the eyes; and the juice, or aqua ſtillat. to be dropt into them, in inflammations of that organ, dimneſs of ſight, &c. We have no preparation of it. Some uſe it in tea.

The aqua ſtillatitia is certainly a ſafe collyrium; and the plant, eſpecially uſed frequently in the manner of tea, may do ſervice in ſome diſeaſes of the eyes, agreeing much with the other mild antiſcorbutics, and vulneraries. But whether there is any ſpecific ophthalmic virtue in it may be doubted. " In
" aqua infuſa, & per aliquot dies pota, viſum acuit, nam omnes humores
" reddit pellucidos. Sapore non differt a veronica mare, & puto eſſe ejuſdem
" virtutis." *Boerh. Hiſt. Pl.* dicta p. 317.

FOENICULUM. *Vide* Roots.

FUMARIA.

SECT. I.

Fumaria, fumus terræ, *offic.* Fumaria, *officinarum*, & *Dioſcoridis. B. P.* 143. *T.* 422. Fumaria, *Dod.* 59. F. vulgaris, *J. B.* iii. 201. *Park.* 287. *R. H.* 405. *Syn.* 204. F. purpurea, *Ger.* 1088. F. vulgaris, latifolia; ſiliquis curtis, non bivalvibus, *H. Ox.* ii. 261. Fumaria, pericarpiis monoſpermis, *H. Cliff.* 352. Common fumitory, Fumiſterrie.

It is common among corns, as well as in gardens, flowering all ſummer. The herb is uſed. In Greek it is καπνος, *i. e.* fumus. " Capnos . . . clarita-
" tem facit inunctis oculis, delachrymationemque ceu fumus, unde nomen." *Plin.* l. 25. c. 13. p. 645. *Dioſcorides*, and *Galen Simpl.* l. 7. p. 49. *F.* give the ſame etymon, though apparently longe petitum. The appearance it makes in a dewy ſummer morning might perhaps have occaſioned the name.

" Capnos

" Capnos fruticosa est herbula, coriandri similitudine prætenera, foliis can-
" didioribus, & cineracei coloris, undeque numerosis; flore purpureo. Hujus
" succus acris est, claritatemque facit oculis, & delachrymationem, ceu fu-
" mus; unde & herba nomen traxit. Illitus cum gummi duplicatos palpe-
" brarum pilos evulsos renasci prohibet." Cæterum herba, in cibo sumpta, copiosam bilem per urinas trahit, *Dioscorid.* lib. iv. c. 110. totum, p. 286. " Succus ejus oculorum aciem acuit, non paulum trahens lachrymarum velut
" ipse fumus: nam hinc ei appellatio indita." *Galen. Simp.* l. 7. p. 49. G.

SECT. II.

It is an attenuating, deobstruent, diuretic, called splenic, and hepatic; and is commended almost in every chronic distemper, especially such as proceed from obstructions in the viscera, scurvy, or internal ulcers.

" *Officin.* Herba cum floribus. *Vires.* Splenetica est, ac epatica; attenuat;
" serosos, bilioso, ac adustos humores sensim expurgat; viscera reserat; re-
" serata roborat; sanguinem purificat. Hinc *usus præcip.* in scorbuto, aliis-
" que morbis mesenterii & lienis, in ictero, in scabie omnis generis, & simili-
" bus. *Præp.* 1. Aqua. 2. Oleum stillat. quod rarum. 3. Succus inspissa-
" tus. Dosis ad ʒj. 4. Conserva summitatum. 5. Syrupus simplex ex succo.
" 6. Syr. compos. 7. Pilulæ de fumaria purgant bilem serosoque humores.
" Dosis ʒj. ad ʒiß. 8. Sal fumariæ ex herba incinerata." *Schrod.* p. 593. Aperiens detersivum ad ulcus pulmonum, scorbuticumque lenius est in *Boerh.* lib. de M. M.

1. It is of a nauseously bitter taste, and no smell: neither acrid, nor styptic. " Gustu toto est amara." *J. B.* " Saporis est amari ingrati." *Nucl. Begl.* 119. " This plant, though very bitter, reddens nevertheless the blue paper, just as
" does aloes: so it seems to contain much the same principles, viz. a salt like
" the natural salt of the earth, but wherein the sal ammoniac predominates
" over the nitre and sea salt: besides the salt of fumitory is conjoined with
" much sulphur and earth, and dissolved in a considerable quantity of phlegm.
" By a chymical analysis fumitory gives much volatile salt, much fixed alca-
" line salt, and much thick oil. All these principles render it laxative, diure-
" tic, a purifier of the blood, and deobstruent: it passes for a specific in all
" the diseases of the skin, in hypochondriac melancholy, cachexy, and dropsy." *T. Hist.* p. 82.—2. Herbæ thea is of a straw-colour, subviscid nauseous bitter taste, and fresh smell; becomes of a dark browniſh-black colour, being mixed with vitriol: dilutes only syr. viol. gives no signs of an ammoniacal salt on the affusion of ol. tart. or aq. calcis, but long kept it becomes very fetid.—3. In a M. S. of *Albinus*'s it is said to be pleniſſima nitro, cui adhæret oleum acre. " Si *chemice* tractetur det crystallos, quæ nitrum referunt, & sunt vi
" aperiente & refrigerante præditæ." *Boerh. Hist. Pl.* p. 389. " Capnos,
" says *Galen* l. c. acris simul & amaræ qualitatis est particeps; nec tamen
" plane expers est acerbæ." *Avicen* and *Mesue* make it cold. *Hoffman* 30.—4. *Galen* says, " Urinam bilioso multamque provocat, sanatque jecinoris ob-
" structiones & debilitates," and adds, " Plebeius quidam ea uti solebat ad
" stomachum roborandum, unaque ventrem lubricandum." l. c. Vide *Aetii*, *Tetr.* 1. *Serm.* 1. *col.* 30. " In viscerum obstructionibus *Aetius* tantopere com-
" mendat

" mendat ſuccum, ut dicat, ſemel quidem adhibitus, dolorem omnem adimit: " ter autem præbitus morbum omnem radicitus tollit. Intelligo ſi in ea " quantitate detur, ut purgare poſſit." *Hoffman*, p. 30. See *Aetii Tetr.* 3. *Ser.* 2. 2. *De opilatione hepatis*, p. 512. B. whoſe next remedy is hepar lupi. " Facultas purgatoria an nota fuerit veteribus in dubio eſt. Sed ita eſt: co- " pia doſeos facit quo minus frequentetur. Sed & tum, cum juſtam doſin " aſſecuti ſumus non vehementer purgat. Eſt enim inter benedicta, ſi Meſuæ " fides eſt. . . Sed quæ eſt doſis illa juſta? Sto cum illis qui aiunt mentem " Meſuæ & Avicennæ eſſe, ſuccum dari debere ab ʒv. ad ʒxi. Decoctum " ad ʒxv. Pulverem ab ʒiij. ad ʒv. . . Conſerva apud me in magna æſtima- " tione eſt, ad expediendas viſcerum obſtructiones, poſt univerſe purgationem." *Hoffman*, p. 31.—5. It is much commended in the jaundice, vapours, ſpleen, cachexy, ſcabie and other diſeaſes of the ſkin, quartan agues, dropſies, worms, &c. Yet it is excluded the *London M. M.*

" Analyſi chymica fumariæ floridæ, demptis radicibus, ℔v. præbuerunt " humoris ℔iv. ʒv. ʒiij. gr. xlij; Salis vol. urinoſi ℈j; Olei ʒj. ʒvj. gr. xv; " Carbonis ʒiv. ʒvß. unde cinerum ʒj. ʒvij. gr. iv. ac inde ſalis fixi alcali " ʒiv. gr. xxx. (ergo terræ ʒx. gr. xlvi.) & jactura fuit ʒiv. gr. xxvii." ſecundum *Geoff.* iii. 500. who adds, " Hæc planta intenſe amara eſt, & char- " tam cæruleam rubro colore inficit. Sale eſſentiali donatur ammoniacali cum " aliqua ſalis mirabilis Glauberi portione, & multo ſulphure conjuncto."

The juice, infuſion, decoction, ſyrup, conſerve, extract, and powder may be given ad libitum. " Diuturnam coctionem non fert, ea enim ſale ſuo " volatile orbatur." *Geoff.* iii. 501. Yet he ſays the extractum is non exiguæ virtutis. *Vide* Lactuca.

G A L E G A.

S E C T. I.

Galega, ruta capraria, *offic.* Galega vulgaris. *B. P.* 352. *T.* 398. *Park.* 417. *H. Ox.* ii. 91. Galega. *Dod.* 548. *Lob.* 509. *Adv.* 392. *Ger.* 153. *J. B.* ii. 342. *R. H.* 911. Galega. *H. Cliff.* 362. Goats rue.

It grows wild in Spain, Italy, &c. In our gardens it flowers in July. The herb is uſed; but ſeldom, if ever, here. It is called by *Fracaſtorius* onobrynchis, and herba Gallica, whence ſome derive galega. " Verum galega " Italica vox eſt, teſtibus Matthiolo, Dodonæo, aliis." *R. H.* " Galega cur " dicatur ignoramus. Ruta ab effectu, non vero odore. Quidam onobrychin, " alii glaucen, nonnulli polemonium, alii polygalam veterum eſſe judicant; " quibus Dioſcorides deſcriptiones contradicunt." *B. P.* " Herba uſus eſt " apud Italos crebrioris; apud nos vero rarioris." *Geoff.* iii. 509.

S E C T. II.

It is diluent and reſolvent; called alexipharmic, and ſudorific; and is recommended in the meaſles, ſmall pox, malignant fevers, peſtilence, poiſons, bites of ſerpents, worms, &c. It may be uſed any way at pleaſure.

" Celeberrimum eſt alexipharmacum ac ſudoriferum, venenum, imprimiſ-
" que peſtilentiale, inſigniter diſcutiens; *uſus præcip.* in petechiis expellendis,
" aliiſque morbis peſtilentialibus, ipſaque peſte curanda; in morbillis, in epi-
" lepſia infantum (exhibetur ſucci cochl. i.) in ictibus ſerpentum, in lumbri-
" cis (quos etiam extrinſecus applicata fugat.) *N. B.* Herba hæc, ſecus ac
" aliæ, citra ſaporem eſt, & inſuper qualitatibus primis temperata. *Præp.*
" 1. Aqua, ex integra planta Julio collecta. 2. Conſerva, ſummitatum ſeu
" florum." *Schroder* 595. It is one of the antiſcorbutica leniora in *Boerh. Lib. de M. M.*

1. There is nothing obſervable in the taſte or ſmell, more than in other ſoft leguminous plants. " Folia ſunt ſapore leguminaceo." *J. B. R. H. Geoff.* " Saporis leguminoſi." *Nucl. Belg.* 121. Foliorum thea is of the colour of old brandy; herbaceous, and a little bitter to the taſte, and of a faint ſmell: ol. tartari does not make it fetid: it reddens a little a ſolutio heliotropii: and mixed with a ſolution of vitriol it becomes greeniſh, black, and opake, and precipitates a dark-grey ſediment. — 2. It has no malignant quality; neither any peculiar effect outwardly applied, ſo far as I can find. " It fattens hens " wonderfully, and cauſeth them to lay eggs more plentifully." *Park.* 418. where it is ſaid alſo to cure colic pains, but fried, and applied warm: and to ſtop gangrenes and ſpreading ulcers, the ſame way, or with vinegar. " Ad " lumbricos, aut ſucci cochlear i. dant, aut herbam in ol. amygd. amar. & " ſem. lini frixam abdomini imponunt, aut denique unguentum parant ex " ſucco cum aloe, myrrha & croco. Hoc qui criminantur quod additis de-
" beatur effectus, non ſuperficialiter ſapiunt. Nam & ſolus ſuccus facit rem." *Hoffman*, p. 244. And—3. Though wonderful virtues are attributed to it, yet they ſeem not much to be credited; for it is little uſed in France, and not at all in Britain. " Ruſtici, authore *Cæſalpino*, hujus ſucco, in os jumentorum, " cum ob venenum depaſtum tument, infuſo, ſanant illa. Hinc fieri potuit, " ut ad homines transferretur. Et confirmavit experientia. Qui enim vipe-
" ras venantur in Italia, ad confectionem theriacæ, ut etiam illi, qui oſtentant " publice, ſi contingat illos morderi, nihil certius herba hac, nec præſentius " habent multo magis freti illa quam decantatis theriacis, inquit *Pena*. Ea " ſpe inducti, qui venenum in corpore humano gigni poſſe putant, dederunt " feliciter in febribus petechialibus. . . Idem fit in peſte. . . A peſte fit ratio-
" cinium ad lumbricos. . . Ab his ad epilepſiam itur." *Hoffman.* l. c. " No-
" biliſſ. vir patriæ ſuæ decus, D. Robertus Boylius, in tractatu de ſalubritate " & inſalubritate aeris, tres quatuorve paginas impendit, galegæ viribus ce-
" lebrandis, in peſtilentialibus & malignis morbis, ex propria obſervatione & " experientia; ut nos monuit D. Tancred. Robinſon." *R. H.* Vide *Boyle's Works*, vol. iv. p. 294. where he mentions only two infected perſons, to whom he ſent it, made up with a little ſugar, in the form of a fine green conſerve, who recovered; adding, " But having made but theſe two trials, I dare not " ground much upon them only. . . . Some little experience has invited me to " believe the commendations given it againſt the bites of venomous creatures." *Schenkius* alſo gives an obſervation of its effect on inflamed lips occaſioned by the poiſon of a viper, which is ſcarcely credible.

" Analyſi chymica galega acidum phlegma copioſum, ſpiritus & ſalis con-
" creti urinoſi aliquantulum, mediocrem olei, exiguam vero terræ portionem

" præbet.

" præbet. Salem eſſentialem continere videtur ammoniacalem, cum ſulphure " & terra adeo implicitum, ut mixtum mucaginoſum conſtituat. (The vir- " tues taken from *Schroder*, without naming him follow: then he adds) " Eſtur cruda vel cocta; vel ſuccus ad cochl. i. aut alterum exhibetur: in " juſculis & apozematibus alexitericis ad M. i. præſcribitur. Fabulam de " duello lacertæ & viperæ a *Foreſto* relatam, ſedulo omiſimus" *Geoff.* iii. 609. His analyſis is imagined, I believe. This fabula, or as *Foreſtus* calls it, pulcherrima hiſtoria de lacerta a vipera læſa, which he had from a Medicus *Bononienſis* fide dignus, when he was ſtudying in that univerſity, is in ſhort this: " Once upon a time a certain old man walking by a river ſide, by " chance eſpying a lizard fighting with a viper, threw himſelf on the ground, " to ſee, but not interrupt, the combat. The ſturdy viper gave the lizard a " ſore wound, ſhe ſtaggered as if dying, but recovering a little, crawled " among the graſs, unobſerved by the viper, till ſhe came to an herb grow- " ing on the bank of the river, qua devorata vires extempore primas recu- " peravit, atque denuo ad viperam ſe convertens, eandem non aliter quam " antea adoritur." She was again mortally wounded, and had recourſe to the ſame remedy. Again ſhe attacked and was wounded a third time. But the cruel, or too curious old man, during this laſt charge, having plucked the herb up by the roots, the lizard wounded returning to the place, but miſſing the remedy, " ſtatim occubuit, atque expiravit. Senex vero hujus " herbæ vim expertus, medicis ea quæ viderat narravit." He ſays the herb is called in Italy graliga or gralega, and well known in the ſhops; and " contra venenum, vermes & peſtem celebratur, forte veteribus incognita, " quanquam nonnulli hanc galegam appellant, cujus fit mentio in Pandectis, " ſub finem." Thus *Foreſtus* (qui obiit A. D. 1597. æt. 75.) De incerto & fallaci urinarum judicio, bb 2. c. 5. p. 208, 209. " Ex tota planta florida " contuſa, & vino albo macerata per ſex dies, aqua deſtillatur, cui eædem " virtutes tribuuntur. Ab ℥j. ad iv. exhibetur." *Geoff.* iii. 610. Its virtues are all from the wine: ſo that brandy is as good.

N. B. Opus Pandectarum Medicinæ, by *Matthæus Sylvaticus*, was publiſhed in 1317. Vide *Freind*'s *Hiſt.* ii. 264.

GRATIOLA.

SECT. I.

Gratiola, *offic.* Gratiola centauroides. *B. P.* 279. Gratiola. *Dod.* 362. *Ger.* 581. *J. B.* iii. 434. *R. H.* 1885. G. vulgaris. *Park.* 220. Digitalis, minima; gratiola dicta. *H. Ox.* ii. 479. *T.* 165. Gratiola. *H. Cliff.* 9. *Gen. Pl.* 25. *P.* 11. Hedge-hyſſop, *rather* Water-hyſſop.

It grows plentifully in moiſt places in Germany, France, and Italy. In our gardens it flowers in July. " Gratiolæ, ſive Gratiæ Dei nomen, recentior " ætas tribuit, propter ſingulares vires, tam per ſuperiora, quam per inferiora, " humores expurgandi, & recentia vulnera conſolidandi. Hæc veteribus in- " dicta videtur, quamvis aliqui papaver ſpumeum Dioſcoridis; alii Eupato- " rium Meſues eſſe velint." *B. P.* Geranium Robertianum, was the Gratia

Dei in the *Old London Pharmacopœia.* Geranium batrachoides, Gratia Dei Germanorum. *Lob.* The chamæciſtus vulgaris is Gratia Dei *Geſner* (hort.) The Lyſimachia cærulea, galericulata, vel gratiola cærulea. *B. P.* is gratia Dei. *Cæſ.* according to *B. P.* 246. But according to *T. H.* p. 266. the gratia Dei *Cæſ.* is our gratiola. All which are reckoned famous vulneraries in ſome place or other.

SECT. II.

It is an acrid and violent purgative and emetic; ſaid to evacuate watery, phlegmatic and bilious humours; and is commended internally in the dropſy, agues, jaundice, &c. " Externe hydrocephalis medetur." *Herman. Cynos.* p. 540.

" *Officin.* Folia. *Vires.* Efficax remedium eſt in humoribus aquoſis, lentis, biliioſiſque ſpecifice evacuandis, quos vel ex remotiſſimis partibus trahit, atque tum per ſeceſſum, tum per vomitum expurgat. Hinc magnus ejus uſus eſſe poterit in hydrope, ictero flavo, &c. Et quia amaritudine inſuper dotata eſt inſigni fugat lumbricos, eorumque ſaburram expurgat. Corrigitur cinnam. ſem. aniſi, glycyrrhiza, &c. Doſis foliorum pulv. ʒi. infuſorum ad ʒij. *Præp.* Extractum, vel ſuccus inſpiſſatus. Doſis a ϑi. ad ʒß." *Schrod.* p. 767. Alcaleſcens eſt, et antiſcorbuticum acrius, in *Boerh. Lib. de M. M.*

For, 1. It is very bitter and nauſeous to the taſte, without ſmell. " Tota planta inſigniter amara eſt, et inodora, quadam cum obſcura adſtrictione." *J. B.* " Tota planta inodora, inſigni amarore donatur cum obſcura adſtrictione." *Geoff.* iii. 532. Gratiolæ thea is of a ſubacrid, nauſeous, and exceſſively bitter taſte; only dilutes ſyr. violarum; reddens pretty much ſolutio heliotrop. and turns a ſolutio vitrioli to a greeniſh dark brown colour, and without occaſioning a precipitation for a long time. — 2. It is very juicy, contains not much roſin, yet loſes little in drying. " The expreſſed juice of this plant is not ſo bitter as is the reſiduum, nor ſo cathartic as a decoction of the ſame: which is true alſo of roſes, peach-flowers, &c. gratiolæ viridis ℔vß. well dried weigh but ℔i. Water eaſily extracts its virtues. Gratiolæ ℔iv. calcined yield of white aſhes ʒiß. whence ſalis fixi ʒivß. may be got." See *Bolduc Mem. Acad.* 1705. p. 245. — 3. Outwardly applied it is ſaid to conſolidate wounds. I think it rather diſcutient in œdamatous and other cold tumors, and detergent in foul ulcers. And 4. Inwardly taken its operation is ſo violent and harſh, that it is little uſed. Yet is commended for dropſies, quartans, gout, ſciatica, cachexy, &c. And Mr. *Bolduc* ſays he found it an excellent vermifuge, infuſed in milk: and that rad. pulv, ʒß. is as good a ſpecific for the dyſentery as ipecacoanha, when the diſeaſe is not gone too far on, being aſtringent as well as bitter. (*Mem.* l. c.) " Non tantum per inferiora, ſed et ſuperiora purgat, et tam violenter, ut quidam helleboro comparent, quidam pityuſæ. Purgat autem utramque bilem, pituitam craſſam, tenuemque, et aquas Hydropicorum. *Hoffman.* p. 32. " It is of a rugged churliſh nature." *Mill. Bot.*

" Analyſi chymica ex gratiolæ floridæ ℔v. prodierunt humoris ℔ivß. gr. ix. (of which the firſt ʒxv. were inſipidæ et inodoræ fere, but ſubacidæ: all the

" reſt, magis ac magis acidæ, the very laſt ʒiiß. being intenſe acidæ, and " only aliquantiſper alcali urinoſæ.) olei ʒi. gr. vi. carbonis ʒiv. ʒvii. gr. xii. " unde cinerum ʒi. ʒivß. ac inde ſalis fixi alcali ʒv. gr. xviii. (ergo terræ ʒvii. " xviii.) et jactura fuit ʒij. gr. xlv." According to *Geoff.* iii. 531. who gives it a ſal eſſentialis tartareo-vitriolicus cum multo ſulphure acri et craſſo.

SECT. III.

It has been given to ʒi. in powder; to ʒij. in infuſion or decoction; the juice to ʒi. and extract to ℈i.

" Ad decoctum vel infuſum, ſumitur a ʒi. ad ʒij. conſerva vel ſuccus a ʒvi. " ad ʒi. datur. Pulveris ℈i. Matthiolo ſufficit. Qui extracto uti malunt, cum " cinnam: in catapotia redigunt, in granis ſubſiſtentes." *Hoffman* p. 32. " Herba recens ad m. ß. vel ſicca ad ʒi. ſed longe tutior ac mitior eſt, ſi cum " lactis ℔ß. leviter incoquatur & colatura propinetur. Extractum cum vino " paratum ad ʒß vel ℈ij. præſcribitur: conſerva vero ad ʒij. vel ʒiij. uſurpa- " tur." *Geoff.* iii. 532. *Ill-proportioned doſes!*

HEDERA TERRESTRIS.

SECT. I.

Hedera terreſtris, chamæciſſus. *Offic.* Hedera terreſtris vulgaris. *B. P.* 306. *Park.* 676. *H. Ox.* iii. 409. H. terreſtris. *Dod.* 394. *Ger.* 856. *R. H.* 567. Chamæciſſus, ſive hedera terreſtris. *J. B.* iii. 855. Chamæclema vulgare. *B. J.* 172. Chamæclema. *Cord. Hiſt. B. P.* Calamintha humilior, folio rotundiore. *T.* 194. *R. Syn.* 243. Glechoma, foliis uniformibus crenatis. *H. Cliff.* 307. Ground-ivy, gill-go-by-ground, alehoofe, or tunhoofe.

It grows commonly near hedges, walls, &c. flowering in April, and through the ſummer. The deſcription of the chamæciſſos in *Dioſcorides* l. 4. cap. 126. p. 290. ill agrees to it. Vide *Hoffman.* p. 160. The herb is uſed. Folia. *Ph. Lond.*

SECT. II.

It is an attenuating antiſeptic, and diuretic vulnerary; called pectoral; and commended for coughs, conſumptions, internal ulcers, gout, ſcurvy, obſtructions in the viſcera, &c. It is reckoned an univerſal purifier of the blood, and a great cleanſer of the urinary paſſages.

" *Officin.* Herba cum floribus. *Vires.* Saporis eſt amari et acris, calfacit " et ſiccat, vulneraria eſt, aperit, abſtergit. Uſus celeberrimi in tartaro tam " pulmonum quam renum aliarumque partium, incidendo, reſolvendo; adeo- " que confert obſtructionibus inde natis et ictero: conducit eroſionibus et ul- " ceribus viſcerum abſtergendis, conſolidandis, &c. Extrinſecus adhibetur " creberrime ad calculum renum reſolvendum (in balneis) ad dolores colicos " reſolvendos (in clyſteribus.) *Præp.* 1. Aqua ſtillatitia ex herba Maio " collecta. 2. Conſerva ex floribus ſummitatum. 3. Syrupus ſimplex, ex

" ſucco.

" ſucco. 4. Syr. compoſitus. 5. Succus. Succum propinatum plurimos a " morte liberaſſe refert Hollerius." *Schrod.* p. 600. " Acre aromaticum, " aperiens deterſivum ad ulcus pulmonum, et antiſcorbuticum lenius, eſt in " *Boerh. Lib. de M. M.*"

1. It is ſomewhat aromatic, and bitteriſh to the taſte; and ſmells pretty ſtrong, reſembling a mixture of calamintha and lamium. " Sapor plantæ amarus; " odor gravis ad mentham quodammodo accedit, aut inter lamium et mentham " ambigit." *R. H.* " Totius plantæ ſapor amarus, odor gravis ad mentham quo- " dammodo accedit." *Geoff.* iii. 542. " The leaves are bitter, a little aromatic, " and redden not much the blue paper. Hence their ſalt ſeems ſomewhat to re- " ſemble tartar vitriolat, mixed with a very little ſal ammoniac, but with much " ſulphur and earth." *T. Hiſt.* 181. — 2. Herbæ thea is of a brandy-colour, taſting and ſmelling like the plant. It neither reddens the blue paper nor ſyr. violarum, but gives a red-wine colour to the ſolution of turnſole. Oleum tartari makes it yellow, gathers a cloud in it ſoon, and precipitates a whitiſh mucus. Solutio vitrioli turns it to a greeniſh black colour, and opake, and precipitates a dark grey ſediment, without becoming clear above.—3. It purifies and preſerves malt liquors. " It is frequently put into ale, which it re- " fines and clarifies; and great quantities of it are drunk in town under the " name of gill-ale, being reckoned antiſcorbutic, aperitive, and good to cleanſe " the ureters." *Miller Bot.* 225. It is ſaid to expell worms in horſes; that the juice ſnuffed up cures the head-ach; and that a decoction of the herb makes a good gargariſm for ſore mouths and throats. " Hujus felicem uſum obſer- " vavi in expellendis vermibus equorum, ſi conciſa detur cum avena." *J. B.* iii. 856. " Succus naribus attractus, cephalalgiam etiam vehementiſſimam " et inveteratam non lenit tantum, ſed et penitus aufert. Medicamentum " hoc auro æquiparandum. Novi quippe qui per decennium et amplius, acer- " rimis doloribus conflictati, ſtatim ab ejus uſu recreati ſunt, nec unquam " poſtea paroxyſmum ſenſerunt." (Ex *John Oldacres.*) *R. H.* The Dutch by " repeated infuſions of it in gin make a very balſamic tincture, which they value much in the gravel. Hence it is a mild aromatic bitter, ſubaſtringent, balſamic and antiſeptic. It keeps well enough without being prepared Dr. *Willis*'s way. Vide *Pharm. ration.* par. ii. ſect. 1. c. 6. And hence, — 4. It is commended in all eroſions and exulcerations of the viſcera, conſumptions, hectic fevers, contuſions, gravel, mictus cruentus, aut purulentus, &c.

" Analyſi chymica ex totius Plantæ recentis ℔v. prodierunt humoris ℔iv. " ℥i. olei ʒxi. gr. xxxiv. carbonis ℥iv. ʒviß. unde cinerum ℥ij. ac inde ſalis " fixi alcali ʒvi. gr. xxxviii. (ergo terræ ʒix. gr. xxxiv.) et jactura fuit ℥viii. " ʒvi. gr. xii." Secundum *Geoff.* iii. 542. " Ob partes bituminoſas, ſalino- " terreſtres, et ſpirituoſas, aperit, abſtergit, diſcutit et vulneraria eſt, tum in- " trinſecus ſumpta, tum extrinſecus adhibita." *Ibid.*

SECT. III.

It may be given in powder, infuſion, decoction, extract, juice, conſerve, any way at pleaſure. It is much uſed by way of tea. It is an ingredient in the ſyr. pectoralis.

" Succus ejus defæcatus ad ʒij. aut iij. infuſum vel decoctum ex aquâ vel " vino propinantur: vel etiam pulvis a ʒß. ad ʒi. Ex ſummitatibus floridis " conditum in officinis præparatur; ſicut ex ejus ſucco ſyrupus et extractum. " In decoctis et potionibus vulnerariis uſus eſt frequentiſſimi." *Geoff.* iii. 543.

HORMINUM.

SECT. I.

Horminum, horminum hortenſe, ſclarea. *Offic.* Horminum ſclarea dictum. *B. P.* 238. *R. H.* 543. Horminum ſativum vulgare, ſive ſclarea. *Park.* 55. *H. Ox.* iii. 392. Orvala. *Dod.* 292. Gallitrichum ſativum. *J. B.* iii. 309. Gallitrichum, ſive horminum. *Ger.* 768. Sclarea. *Tab. Ic.* 373. *T.* 179. Salviæ ſpecies *Linnæi Gen. Pl.* 30. p. 14. Common garden clary.

Where it grows wild I find not. " Scarleam ſponte naſcentem, videre non " memini." *Cluſ. Hiſt.* ii. 28. " Habitat in Græcia, Apulia." *L. Sp. Pl.* p. 24. It is common in gardens, flowering in June and July the ſecond year after it is ſown, being a biennial plant. The leaves are uſed. " Folia cum " floribus, ſed raro." *Schrod.* 603. " Herba." *Phar. Lond. Vet.* " Herba, " ſemen." *Phar. Edinb.*

Horminum is ſaid to come from ὁρμαινω, cum impetu feror, ſc. in venerem; quia ad venerem ſtimulat, ut Dioſcorides loquitur. Sclarea or " Scar- " lea eſt a Germanico ſcharlach, qui color eſt coccineus, ſeu chirmeſinus." *Hoffm.* 256. " Ασκληρος, aridus." *Lemery.* From ſclarea comes clary; but from clarus, as if it were clear-eye, a clarificandis oculis. *H. Ox.* " Gallitri- " chum dicitur eſſe Galli criſta, a florum ſimilitudine .... Apud Gallos in " eam nominis celebritatem venit, ut or-vala, ſeu or-valla vocaretur, quaſi di- " cas auro contra valoroſum. Item *tout-bonne*, tota bona." *Hoffm.* 256-7. But that this is either the horminum ſativum or ſylveſtre of the ancients I cannot aſſert. Vide *Theoph. Hiſt.* l. 8. c. 1. & 7. *Dioſcor.* l. 3. c. 145. p. 232. *Plin.* l. 18. c. 7.

SECT. II.

It is ſtimulating, attenuating, diaphoretic, and diuretic; called uterine, and antiſpaſmodic: and is commended in hyſteric fits, colics, fluor albus, frigidity, &c. though little uſed here. The doſe need not be determined, as it is a weak medicine.

" Calfacit, ſiccat, abſtergit, attenuat. Uſus rari, niſi quod in vino, cum flo- " ribus ſambuci et vitis ſuſpendi ſoleat." *Schrod.* 603. " Eſt aperitiva, ce- " phalica, ſtomachica, carminitiva, hyſterica, emmenagoga; partum adjuvat, " et tormina poſt partum tollit. Cerviſiæ, cui ab aliquibus additur, attribuit " vim egregie inebriandi; externe diſcutit." *Nucl. Belg.* 264. *De his omnibus autem dubito:* though

1. It is of a little-bitteriſh, and ſomewhat-aromatic taſte; and ſtrong, heady, or heavy, and as it were vinous ſmell. " Odor totius plantæ vehemens et " gravis;

" gravis; ſapor amarus." *R. H.* " Odoris eſt fortis et grati, fere inſtar lu-
" puli, et ſaporis amari." *Nucl. Belg.* 264. " Folia odorem quaſi citratum,
" acutum, vehementem, gravem tamen exhalant; guſtu amara ſunt et aroma-
" tica. Eorum ſuccus chartam cæruleam parum mutat." *Geoff.* iii. 590. But it is ſcarcely bitteriſh. — 2. Foliorum thea is of a brandy-colour, of a greeniſh or herbaceous taſte, neither bitter nor aromatic: ſolutio vitrioli turns it of a greeniſh black, and opake; and precipitates plentifully a dark grey ſediment: and it reddens ſol. heliotrop. but not blue paper. Cum galega convenit fere.— 3. It is ſaid that infuſed in wine or ale, it increaſes their intoxicating quality. " Semen καρίδαριαν, capitiſve gravitatem facit odore, quem univerſa ſpirat, non
" tamen ingrato; eoque magni uſus, quibuſdam Septentrionalium, ad Zythi,
" Bieræque confectionem: Lupuli namque penuria, vel vegetioris potionis
" faciendæ cauſa, cortinis ferventibus addunt, fitque temetum, quo, non multis
" depletis poculis, temulenti fiunt, hilaritate propemodum inſana." *Lob. Adv.* 240. " Ut calida eſt ſcarlea certo, ita ſicca certo; verum cum magna vaporo-
" ſitate. Argumento ſit, non cerviſia tantum, ſed et vinum, quod ab impo-
" ſitu tantum herbæ, plane Muſcatellinum mentitur, et facillime decipit incau-
" tos." *Hoffman.* 257. " Horminum cœnopolis Germanis imprimis innotuit,
" inquit Etmullerus, pro vinis ſuis adulterandis. Solent namque ex ejus flori-
" bus, cum floribus ſambuci, per infuſionem, vinum Rhenanum in Moſchatel-
" linum mutare." *Geoff.* iii. 590. — 4. Externally it is diſcutient and anodyne. " Herbæ pulvis ſternutamenta provocat, catarrhum tollit et cerebrum pur-
" gat. Decocta in deſeſſionibus utilis eſt ad trahendos menſes, &c. *R. H.* " Crato commendat in ſuffocationibus uteri et ſimilibus affectibus unguentum
" ex ſclarea, cum butyro et tacamahaca." *Ibidem.* And — 5. Internally it is commended in obſtructis menſibus, lochiis, hard-labour, grindings, ſterility, impotency, &c. " Schwenckfeldius (ſcribit) mederi epilepſiæ, et ſuffocationi
" matricis." *J. B.* " Noſtrates folia ovis conquaſſatis, cum flore lactis et
" pauca farina perfuſa, et in ſartagine frixa pro placentis, menſis ſecundis in-
" ferre ſolent, et ad lumborum imbecillitatem commendant. Sunt ſane fercu-
" lum palato ſatis gratum, quod ad renes corroborandos, et venerem ſtimu-
" landam valere creditur." *R. H.*

" Analyſi chymica, ex totius hormini floridi ℔v. demptis radicibus pro-
" dierunt humoris ℔iv. ℥iv. ʒiijß. olei ʒi. ʒv. gr. xxiv. carbonis ℥v. ʒv. unde
" cinerum ℥ij. ʒvi. gr. xx. ac inde ſalis fixi alcalini mere ʒvi. gr. xxx. (ergo ter-
" ræ ℥i. ʒvii. gr. lxii.) et jactura fuit ℥iv. ʒij. gr. xii." Secundum *Geoff.* iii. 589. " Salem continere videtur (adds he) tartareo-ammoniacalem, cum multo
" oleo, tum tenui tum craſſo, et terra conſociatum."

" Semen oculis inditum utile eſſe traditur ad excutiendam eorum caliginem,
" et educenda corpuſcula quæ in illos inciderunt. Quippe emollito humore ocu-
" li hujus ſeminis mucilagine, id quod in oculos illapſum eſt quaſi obvolvi-
" tur, et cum ſemine tandem ejicitur." *Geoff.* iii. 592. This effect of the ſeed is atteſted by Miraldus, Ambroſe Paré, Hildanus, and others, and related by *J. B.* iii. 310. who ſeems to approve of it, as experientia multoties comprobatum, alſo by Mr. *R.* (*H.* &c.) But recommend it who will, I will not. Mr. *B. Gibſon* told me he once made the experiment on himſelf, whether for dimneſs of ſight, or to get out ſomething like motes, I do not remember: but he found the remedy worſe than the diſeaſe; for it gave him a great deal

of

of pain, inflamed his eyes, and it was with difficulty he got it out again. The ſeed is indeed mucilaginous: and this makes it the more difficult to get it out, eſpecially as it ſwells much very ſoon by moiſture.

HYPERICUM.

SECT. I.

Hypericum, herba perforata. *Offic.* Hypericum vulgare. *B. P.* 279. *T.* 254. *Park.* 572. *H. Ox.* ii. 469. *Flor. Lap.* 223. Hypericum. *Dod.* 76. *Ger.* 539. *R. H.* 1018. *Syn.* 342. H. vulgare, ſive perforata; caule rotundo, foliis glabris. *J. B.* iii. 381. Common S. John's wort. — "Hujus petala ad unum "tantum latus punctis nigris notantur, atque crenata ſunt." Notante *D. Juſſieu* in MSS. *Quod veriſſimum eſt.*

It grows among buſhes, in thickets, and hilly paſtures, flowering in July. The herb, flowers, and ſeeds are uſed. "Folia et flores." *Schred.* 604. & *Ph. Lond.* 11. But the tops with the ſeed-veſſels and ſeeds are preferable. The ſeed is very ſmall, oblong, brown, and of a bitteriſh reſinous taſte, and pine-ſmell.

Hypericon *Plinio*, ὑπερικον, *Dioſcoridi*, ἡ ὑπερεικος. *Nicandro in Alexiph.* "Hyperici nominis rationem non invenio. *R. H.* 1017. "Nomen Græcum "denotat quod ὑπερ ἐικονας, ſuper imagines et ſpectra dominium habeat: fu- "ga Demonum vocatur . . . A *Paracelſo* ſolis terreſtris nomine inſignitur, &c." Vide *Oſw. Crollius de Signat.* p. 47. It is commonly pronounced hypericum, and *Andromachus* favours this, "τοσσον δ'ὑπερικῳ, τοσσον δ'ἐπιμισγεται ἀμλι." Notante *Smetio.* Though *Bates*, *Shipton*, *Douglaſs*, make the *i* long. There are in *Dioſcorides* l. 3. c. 171. 172. 173. & 174. four plants, *viz.* ὑπερικον, ἀσκυρον, ἀνδροσαιμον, & κορις, which *Hoffman* p. 261. thinks differ only in magnitude; and probably are ſpecies of the ſame genus. "Non aliter inter ſe "differunt, quam ut genus et ejuſdem ſpecies" ſays Mr. *Ray* of the firſt three, p. 1017. But whether our S. John's-wort is any of them, I think not ſo certain. "Perforata vulgo, quod folia ſoli objecta innumeris foraminibus "ſcatere videantur: hinc et poroſa quibuſdam." *B. P.*

"Hypericum, alii Androſæmum, alii corion appellant: ſunt qui et chamæ- "pytyn, quoniam ſemen odore pineam reſinam imitatur. Frutex eſt ſurculaceus, "dodrantalis, rubeſcens, foliis rutæ; flore vero luteo, (Leucoio ſimili, *Orib.*) qui "digitis tritus ſanguineum ſuccum remittit; qua ex cauſa etiam Androſæmum "appellatum eſt; calyculis ſubhirſutis, in rotundo oblongis, hordei magnitu- "dine, in quibus ſemen nigrum & reſinoſi odoris. Gignitur locis cultis et aſ- "peris." *Dioſcor.* l. 3. c. 171. p. 242.

SECT. II.

It is an attenuating, antiſeptic, ſubaſtringent, and diuretic vulnerary; called cephalic, and alexipharmic: and is recommended internally for wounds, bruiſes, ulcers, hyſteric fits, melancholy, madneſs, hæmoptoes, mictus cruen-

tus, dyſentery, the gravel, agues, worms, &c. and outwardly as anodyne, diſcutient, and detergent.

" Calfacit et ſiccat, eſt partium tenuium, diureticum et vulnerarium. *Uſus* " *Præcip.* in vulneribus mundificandis, conſolidandis (intus et extus.) in ſan- " guine coagulato reſolvendo, in calculo renum atterendo, in lumbricis fu- " gandis (*ſcil.* ſi tempore exaltationis collecta fuerit, alias hac facultate deſtitui- " tur.) Extrinſecus in contuſionibus præcipue nervorum; in tremore, in par- " tu allevando (fit ſuffitus.) *N. B.* Paracelſus refert inter herbas veneficia " ac ſpectra arcentes . . . *Præpar.* 1. Aqua ſtillat. ex foliis ac floribus. 2. O- " leum, ex infuſione florum in oleo communi. 3. Sal, ex planta integra in- " cinerata. 4. Tinctura. Doſis gr. vi. ad ʒß." *Schrod.* 604. Acidum auſterum, et aperiens deterſivum ad ulcus pulmonum eſt in *Boerh. de M. M.*

1. It is of a bitteriſh reſinous taſte, and aſtringent; and of a pretty ſtrong ſmell: the ſeeds and ſeed-veſſels are more reſinous than the leaves; but all the plant abounds with a balſamic ſulphur. " Folia . . . Sapore ſicco et adſtringente, " cum aliquo amarore: ſemen ſapore reſinoſo, *Lobelio* amaro et ingrato. Tam " flores, quam capitula, ſemine gravida, ſanguineum ſuccum reddunt." *J. B.* " The leaves are ſtyptic, and a little ſaltiſh: they contain a ſalt ſomewhat " like ſal. ammoniac, but united to much earth, and diſſolved in a liquor re- " ſembling the ſpirit of turpentine: for the tranſparent points in the leaves, " which look like holes; the black points on the margins of the flowers; and " the tubercles on the fruit are ſo many veſicles (*bouteilles*) full of this li- " quor." *T. Hiſt.* p. 101. *Geoff.* iii. 607. which being extracted with oils or ſpirits is highly valued as a vulnerary, both inwardly taken, and outwardly applied.—2. It is alſo commended for the jaundice, gout, rheumatiſm, apoplexy, epilepſy, &c. " Eſt præſtantiſſimum ad lumbricos pellendos, ſi flores in ſp. vi- " ni infuſi exhibeantur." (Ex *Bartholino.*) *R. H.* " Si herbam inſpergas ca- " ſeo, omnes vermes exiliunt." *Hoffm. Cynos.* p. 430.

" Analyſi chymica, ex totius plantæ floridæ ℔v. demptis radicibus, prodi- " erunt humoris ℔iij. ʒxii. ʒiijß. olei ʒiv. ʒi. gr. l. carbonis ʒxiß. unde cinerum " ʒi. gr. lx. ac inde ſalis fixi parum alcali ʒij. gr. li. (ergo terræ ʒvi. gr. ix.) " et jactura fuit ʒiij. ʒvi. gr. lviii." Secundum *Geoff.* iii. 607. who gives it a ſal eſſentialis vitriolico-ammoniacalis.

SECT. III.

It may be given in ſubſtance to ʒi. and more; to ʒß. in infuſion, or decoction. The oleum hyperici is by infuſion and decoction ſummitatum in oleo olivarum. The leaves are in the theriaca; and ſeed in the mithridatium.

In the *New London Diſpenſatory* the mithridatium has hypericum in it; but it is not ſpecified whether leaves or flowers are to be taken: and the ſeeds are not in the *M. M.* " Summitates floridæ ut plurimum in aqua vel vino de- " coctæ vel infuſæ ad m. i. uſurpantur: folia nonnunquam et ſemina ad ʒi. " præſcribuntur." *Geoff.* iii. 608. " ℞ Sem. hyperici ʒi. conſervæ florum " nymph. ʒß. (ʒij. in *Cynos.*) F. Bolus contra maniam et noctambulationem, " (& deliria, *Cynos.*) ℞ ſem. hyperici ʒi, ſumm. hyperici, m. i. anagallid. m. ij.

" F.

" F. ex aqua decoctum contra maniam et delirium." *Herman.* MSS. Theſe and ſuch like ought to be tried. " It is obſervable, that the flowery tops tinge " expreſſed oils of a red colour (which very few vegetable ſubſtances will do) " and communicate a blood-red to rectified ſpirit. The oil tinged by them is " kept in the ſhops." *New Diſpenſatory* p. 140. But ol. hyperici *Pharm. Lond.* is made with the flowers only.

HYSSOPUS.

SECT. I.

Hyſſopus. *Offic.* Hyſſopus *officinarum*, cærulea, ſive ſpicata. *B. P.* 217. *T.* 200. Hyſſopus vulgaris. *Dod.* 287. *Cluſ. H.* 356. *Park.* i. *H. Ox.* iii. 361. Hyſſopus *Arabum*, *Meſuæ et officinarum. Lob.* 237. *Adv.* 184. H. Arabum. *Ger.* 579. Hyſſopus ſpicis ſecundis. *H. Cliff.* 304. Common hyſſop, or garden-hyſſop. Hyſſopus, vulgaris, ſpicatus, anguſtifoliis, flore cæruleo. *J. B.* iii. 274. *R. H.* 516.

Where it grows naturally I cannot find. *Lobel* ſays he found it in ſome places in Italy. " Felicior ſane nobis fuit Lobelius, cum enim eadem loca " peragraremus, hyſſopus nullibi in conſpectum ſe dedit. Hæc planta mul- " tipliciter variat, foliis, odore, floribus." *R. H.* In gardens it flowers in July. The herb in flower, or the flowering ſhoots of that ſeaſon are uſed, or the ſpikes in flower and leaves. For it is a ſhrubby perennial plant. " *Officin. nat.* folia cum floribus collecta Auguſto." *Schrod.* 605. " *Uſu:* her- " ba," *Dale*; *Phar. Edin.* &c. " The whole plant is uſed." *Miller.* " Her- " ba integra florida uſitata eſt." *Geoff.* So that *Schroder* is the moſt accurate." " Folia." *Lond. M. M.*

Whether the name hyſſopus be originally Greek or Hebrew, there is reaſon to think this plant is neither the *Eſof* of the *Hebrews*, nor ὑσσωπος of the *Greeks*; though perhaps theſe did not differ. Vide *Le Clerc's Hiſt.* p. 626. I ſhall only take notice, that καλαμος in *St. Matthew's Goſpel*, ch. 27. v. 48. is ὑσσωπος in *St. John*'s, c. 19. v. 29. Probably it is the (*zufe* or *cyfe*, i. e.) hyſſop of the Arabians. " Sed quid eſt hyſſopus noſter uſualis? *Arabum.*" *Hoffm.* 263. Vide *Meſue Simpl.* l. 2. c. 18. fol. 42. with whom it is purgative; as alſo with *Dioſcorides* l. 3. c. 30. p. 185.

SECT. II.

It is an attenuating diaphoretic, and diuretic, or a ſtimulating aromatic; called pectoral, ſtomachic and carminative; and is commended internally for coughs, hoarſeneſs, aſthmas, &c. and externally for contuſions, blood-ſhot eyes, and foul mouths.

" Calfacit et ſiccat 3. partium tenuium eſt, attenuat, aperit, abſtergit. " *Uſus præcip.* in affectibus pulmonum tartareis, tuſſi, aſthmate. Extrinſecus " adhibetur crebro ad ſugillationes oculorum, ad uterum mundificandum, au- " riumque tinnitus tollendos (per tritorium ſuffitus ſuſceptus) ad oris abſter-

" fionem (in gargariſmis.) *N. B.* Sunt qui abſinthio in corroboratione ven-
" triculi præferunt. *Præp.* 1. Aqua ſtillat. ex herba et floribus. 2. Oleum
" ſtillat. 3. Conſerva, ex floribus. 4. Species diahyſſopu, *Nic.* 5. Syrupus
" ſimplex, ex ſucco. And, 6. Syr. compoſitus." *Schrod.* 605. Acre aroma-
ticum eſt, et aperiens deterſivum ad ulcus pulmonum, in *Boerh. M. M.*

1. It is of a warm, bitteriſh, but not diſagreeable taſte, and fragrant aro-
matic ſmell. " Folia ſapore acriuſculo, odore non ingrato." *J. B.* " Odoris
" eſt valde aromatici, ſaporis acris et calidi, præcipue dum floret." *Nucl. Belg.*
146. " Hyſſopus ſapore acri, et odore gravi aromatico donatur." *Geoff.* iii.
612. " Hyſſopus *Arabum* odorem habet acrem et aromaticum, qui nares et
" cerebrum ingrata quadam jucunditate ferit, ſed et ſaporem fervidum, ſuaque
" acrimonia palatum totum pervadentem, quin præterea amarum." *Hoffm.*
p. 264.—2. Summitatum thea is of a ſaffron tincture, and agreeable warm aro-
matic taſte. Solutio vitrioli turned it brown, precipitating plentifully a dark
grey ſediment. Ol. tartari p. d. made little change on it; but aqua calcis
turned it yellow and a little muddy. With ſp. aceti it was diluted only.
—3. " Analyſi chymica, ex hyſſopi floridi ℔v. prodierunt humoris ℔iv. ℥i.
" ʒvi. ſalis vol. urinoſi ʒß. olei ℥ij. ʒvij. carbonis ℥vii. ʒi. gr. xxiv. unde ci-
" nerum ℥ij. ʒvi gr. xxiv. ac inde ſalis fixi alcali ʒvii. (ergo terræ ℥i. ʒvii. gr.
" xxiv.) et jactura fuit ℥iv. ʒi gr. xii." Secundum *Geoff.* iii. 612. who adds,
ſalem eſſentialem obtinet ammoniacalem.—4. It is commended alſo for dropſies,
epilepſy, ecchymoſes. " A frightful black contuſion of a leg, was cured, in
" a few hours, by applying the chopt leaves, mixed with freſh butter in the
" form of a pultis." Vide *Boyle's Works* iv. p. 209. It is by no means ſo
acrid as ſome make it; neither has it any ſpecific pectoral virtue, more than
many ſuch aromatics. We uſe it almoſt only in the diſtilled water. It may
be given in ſubſtance, infuſion, and decoction in large quantities. I never
knew the oleum hyſſopi eſſentiale uſed.

" Hyſſopus cum carnibus bubulis decocta, cum aliis oleribus minutim con-
" ciſis, non inſuaviter ex jure editur, ori ac ventriculo grata. Quantopere
" hyſſopus ſugillationi oculorum confert teſtis ſit *Riolanus* ſenior, &c." Vide
R. H. 516. or *Geoff.* iii. 614. for this quotation; as alſo for a paſſage from
Mr. *Boyle*, being an obſervation of its effect in a great contuſion.

L A C T U C A.

S E C T. I.

Lactuca. *Off.* Lactuca ſativa. *B. P.* 122. *T.* 473. *Dod.* 644. *Ger.* 306.
R. H. 220. *H. Ox.* iii. 57. *Park.* 811. *H. Cliff.* 384. Lactuca. *Park.* par. 498.
L. ſativa, vulgaris, capitata & non capitata. *J. B.* ii. 997. L. ſativa, folio
ſcariolæ. *Lob.* 121. *Adv.* 89. Garden-lettuce.

Great variety of lettuces are cultivated in the gardens. *B. J.* (p. 81, 2, 3.)
mentions about 50 of them. But where any of them grow wild I know not.
" Creſcendi locum addam & differentiam, cum quis dixerit a qua ſylveſtri
" planta hæc originem duxerit. An a lactuca, caule & foliis aculeatis?" *H.*
Cliff. 384. that is, Lactuca ſylveſtris odore viroſo. *B. P.* 123. *T.* 473. The

greater ſtrong-ſcented wild lettuce. The leaves, tho' remarkably medicinal, are more uſed at the table than in the ſhops. " *Officin. nat.* Folia & ſemen." *Schrod.* 611. " Herba, ſemen." *Ph. Edin.* from the *old London-Diſpenſatory*, more improperly; the caulis &c. being parts of the herb, which are not uſed. The ſeed, one of the leſſer cold-ſeeds, is ſmall, long, flat, and light. Some white, others dark brown, without any remarkable taſte or ſmell.

It is a lacteſcent plant; hence lactuca is its name. " Lactuca quod copia " lactis exuperet, & lac augeat, θριδαξ, *Dioſcoridi* l. 2. c. 165. *Theophr.* hiſt. " l. 7. c. 3." *B. P.* l. c. Dioſcorides does not deſcribe it, (v. p. 145.) as commonly known: but we have ſo much of it in Theophraſtus, and Pliny (l. 19. c. 8. p. 502. and elſewhere) as, with its conſtant and univerſal uſe, leave no room to doubt of our lettuce being the θριδαξ and lactuca of the ancients; which its virtues alſo confirm.

SECT. II.

It is diluent, reſolvent, ſoporiferous, anodyne, hepatic and nouriſhing; called antaphrodiſiac; and is commended in all inflammatory, bilious, and putrid diſeaſes, in heat of urine, nephritic pains, want of ſleep, vapours, ſcurvy, &c.

" Refrigerat ad gradum uſque 3. ſiccat mitius, conciliat ſomnum, bilis " ferveſcentiam ac æſtum compeſcit, lac auget, alvum leniter movet, ven- " triculo convenit, multi ac laudabilis nutrimenti eſt; unde & in acetariis uſur- " pari crebrius ſolet. Extrinſecus ſedat dolorem capitis, medetur ambuſtis, " ſomnum conciliat (in lotionibus pedum.) Semen valet ad gonorrhœam vi- " rulentam, ad urinæ ardorem, ut & ad reliqua quibus folia convenire dixi- " mus. *Præpar.* 1. Aqua, ex foliis. 2. Succus inſpiſſatus. 3. Caules con- " diti." *Schrod.* 611. Olus molliſſimum, amarum lacteſcens frigidum, aperiens deterſivum ad ulcus pulmonum, nephriticum, antiſcorbuticum frigidiuſculum, & in calculo proprium eſt, in *Boerh. lib. de M. M.*

1. It is of an agreeable, ſweetiſh, cooling, taſte, ſometimes a little bitteriſh; and ſoporiferous, or poppy ſmell. " Eſt lactuca folio lacte prægnante, per " primam adoleſcentiam grato, tandem amaro & cibis abdicato, quod fit ubi " cauleſcit planta". *J. B. R H.* " Lactucæ omnes abundant ſucco lacteo, " dulci & grato, præcipue juniores, in aliis magis eſt amaricans." *Nucl. Belg.* 156. The common pellucid juice is ſweet, and contains probably a ſaccharine ſalt; the proper milky juice is bitter and ſmells like opium, indeed is a kind of it; and according as the plant contains more or leſs of this, it is more or leſs bitter: ſome of the varieties have commonly more, others leſs of it proportionally; and in dry ſoils and ſeaſons, and when cauleſcent, it moſt abounds, eſpecially the ſtalks. On this depends the ſomniferous; on the juice the diluent; and on the more ſolid parts the nouriſhing qualities of this famous tho' common plant. Hence ſays Dioſcorides " decocta magis alit." — 2. Cows, rabbits, and other animals eat it and are nouriſhed by it. " Lac- " tucæ moderato eſu hominem nutriunt. At ſi quiſpiam expreſſum earum ſuc- " cum largiter hauſerit, non ſecus profecto morietur, quam qui aut cicutam aut " papaver ſumpſerit." *Galen.* ſimpl. l. 3. c. 18. fol. 22. A. " Galenus ſuccum " refert e lactucis expreſſum, & ad cochlearium iv. ſeu ℥ij. quantitatem " intus ſumptum, non ſecus ac cicuta & papaver hominem interficere; quamvis

" folia

" folia majori copia, quam pro ſucco coch. iv. exprimendo opus eſt comeſta, " damnum nullum inferant." *Geoff.* iii. 652. But where Galen ſays ſo I cannot find.—3. The hypnotic quality of lettuce, was known to all the ancients. " Som- " no vero aptum eſt papaver, lactuca, maximeque æſtiva, cujus cauliculus " jam lacte repletus eſt, morum, porrum." *Celſus*, l. 2. c. 32. " Lactuca ſa- " tiva ſtomachontilis modice refrigeratoria, ſomnum concilians (ὑπνωτικη) al- " vum emolliens, & lac evocans. Verum decocta magis alat. . . . Cæ- " terum cum in caulem exierunt, vim quandam adipiſcuntur ſucco lactique " ſylveſtris lactucæ ſimilem." That is like poppies hypnotic and anodyne. Vide *Dioſcor.* l. 2. c. 165, 166. " Multi medici, quemadmodum fructibus " autumnalibus ficus, ita hoc olus aliis omnibus antepoſuerunt: ſucci enim " eſt quam alia omnia laudabilioris: . . . . Plerique autem, priuſquam " in caulem aſſurgat, ipſa utuntur, aqua incoquentes: quod ego nunc, ex " quo dentes mihi male habent, cæpi facere. . . . Etenim in juventute, quo- " niam os ventriculi (ἡ ἀνωγαστηρ) bile efferveſcebat, æſtus moderandi gratia, " lactuca utebar. Cum autem ad provectam æſtatem perveniſſem, olus hoc, " contra quam in juventute, ſomnum jam omni ſtudio & induſtria accerſen- " ti, auxilio fuit. Quippe qui etiamnum juvenis lucubrandi gratia, vigiliis " dedita opera, me aſſuefacerem; declinante jam ætate, ipſa ex ſe inſomni, " gravique hoc incommodo afficiebar. Adverſus quod unicum mihi præ- " ſentiſſimum remedium lactuca veſpere commanducata fuit." *Galen.* de alim. fac. l. 2. c. 40. Vid. *J. B.* Hence he uſed the decoction, as well as the decocted herb; for otherwiſe it would have had little effect, more than other olera mollia, in want of ſleep, tho' more laxative. " Hanc lactucarum vim " anodynam quotidie experimur, quæ quidem non a quodam narcotico et no- " xio principio dependet, ut nonnulli opinati ſunt: ſed ab aquoſo ſuo ſucco " nitroſo, quo humorum efferveſcentiam temperare valent, ventriculi, hepa- " tis, renum, cæterorumque viſcerum ardorem et æſtum mitigare, eorum " fibras nimis criſpatas et vividius oſcillantes laxare, ſicque functiones om- " nes, ac proinde ſomnum in integrum reſtituere." *Geoff.* iii. 650. " Lactucæ " capitatæ exſiccatæ, dum igne aperto comburuntur fulgurationes identidem " emittent, non ſecus ac nitrum in carbones projectum producere ſolet." *Geoff.* iii. 646. *Does it ſo?*—But whether or not is the Bardana &c. whoſe leaves (as he ſays) flaſh ſomewhat like nitre, or even any ſuccus nitroſus, anodyne and ſomniferous by themſelves like the lactucæ? Beſides if the anodyne and hypnotic virtue of opium depends on a principium narcoticum et noxium; ſo does that of lettuce: its milky juice inſpiſſated taſtes and ſmells like opium, and has the ſame effects, tho' no nitre can be got from it, at leaſt not ſo much as can have any effect. Altho' the eſſential ſalt of lettuce were pure nitre, which I believe he will not aſſert, though he makes it only (and it is but a conjecture, it appearing to be more ſaccharine than nitrous, from the taſte of the plant) a " ſal " nitroſo-ammoniacalis, qualis exurgit ex miſtura ſpiritus nitri et ſalis volatilis " urinoſi." *Ibid.* which can be proved only by thus compounding a ſalt of the ſame nature with the ſal eſſentialis lactucæ: But I ſay ſuppoſing it were pure nitre, it muſt bear ſo ſmall a proportion to the other principles of this inſpiſſated juice, as to have no claim to any of its virtues. What effect can a grain, yea perhaps not the hundred part of a grain of nitre, have in procuring ſleep? Few plants have been ſo much celebrated and uſed in all ages

as lettuce has been. Vide *Bod.* in *Theoph.* p. 778.—781. *J. B.* ii. 995.—1001. It is certainly of great use in all diseases, ubi fibræ nimis rigidæ ac elasticæ sunt, and where muriatic, alcaline, or purulent acrimony offend. It is commended in the soda, sive ardor ventriculi, gonorrhæa, melancholia, hypochondriaca, &c. "Lactucis . . . est quidem natura omnibus refrigeratrix, "et ideo æstate gratæ stomacho, fastidium auferunt, cibique appetentiam fa- "ciunt. Divus certe Augustus lactuca conservatus in ægritudine fertur, pru- "dentia *Musæ* medici. . . . Sanguinem quoque augere creduntur." *Plin.* l. 19. c. 8. p. 502. Galen recommends it for food in tertians, but *Mr. Vaillant* found it a remedy. "Sebastianus Vaillant Sexennis . . . . neque "diu postea febre laboravit intermittente, quæ eludens lecta remedia, atque "exquisitam diæam, a medico præscripta, ultra quatuor mensium spatia, lan- "guidum trahebat. Ille, instinctu felici impulsus suas per herbas pulchram "sane sibimet medicinam fecit puerulus. Opportunitatem namque nactus, "dum omnes ad sacra colenda exiverant, solus de lecto surgit, herbas petit, "legit in horto lactucas, hasque solo respersas aceto, avide comedit, palato "gratissimas suo, atque corpori salubres: illico quippe incolumis evasit, at- "que convaluit integre." *Botan. Paris.* præf.

"Epotum vero ipsius semen, venerem assidue somniantibus opitulatur, et "concubitum arcet. At ipsæ in cibo frequentiores claritati oculorum offi- "ciunt." *Dioscor.* l. c. Lactucam sylvestrem narcoticam esse et soporiferam, "adeoque viribus papaveri similem, ut Dioscorides et Plinius tradunt, opii "vehemens et virosus odor abunde convincit. Verum omnia in genere opi- "ata irritare potius quam extinguere appetitum ad venerem me jampridem "monuit D. M. Lister, saltem modice sumpta, non secus ac vinum, ac alii "generosi liquores, quibus et viribus quodammodo respondere videntur. De "lactuca sativa aliter se res habet. Hæc enim, dum adhuc recens et tenera "est, antequam excaulescat, commanducata, certo certius veneri adversa- "tur, et libidinem extinguit." *R. H.* 221. But, with all deference, I may say on as good ground, certo certius succus lacteus lactucæ sativæ et sylvestris, est plane ejusdem naturæ: and that neither opium, nor wine, even modice sumpta, do always appetitum ad venerem irritare. They may prove incentive at one time, and not at another, on the same person, even in health, according to his present circumstances. Vide *Opium.* Such prejudices against lettuce I place among the vulgar errors. Nor do I see any reason why "asth- "maticis interdicuntur, ac illis quibus visus debilior est." Vide *Geoff.* iii. 653. while they are found so beneficial malo hypochondriaco laborantibus. Vide *J. B.* p. 651.

Mr. Geoffroy has favoured the public with the analysis, 1. Lactucæ capitatæ. *B. P.* foliorum tenerorum, et nondum in caput conglobatorum. 2. Lactucæ capitatæ capitum, cum radicibus. 3. Foliorum lactucæ capitatæ, tum virentium tum albicantium, demptis caulibus et medulla. 4. Lact. cap. caulium seu medullarum. 5. Lact. cap. radicum. 6. Lact. cap. seminum. 7. Totius lactucæ capitatæ floridæ. 8. Succi ex lact. capitatis expressi. 9. Massæ residuæ foliorum lactucæ capitatæ, ex quibus succus fortiter et accurate expressus fuerat. 10. Decocti lactucarum aqua coctarum transcolati, et ad extracti liquidi, seu syrupi consistentiam in vase aperto redacti. 11. Foliorum lactucæ romanæ (longæ dulcis. *J. B.* ii. 998. T. 473.) candidissimorum

rum et tenerorum. & 12. Lactucæ ſylveſtris (coſta ſpinoſa *B. P.* 123.) ſemipedem altæ, demptis radicibus. Tho' not all equally circumſtantial. I ſhall tranſcribe one with a uſeful obſervation, or two, he makes on them.

" Analyſi chymica ex lactucæ capitatæ foliorum tenerorum et nondum in ca-
" put conglobatorum ℔v. prodierunt humoris limpidi, odore et ſapore virentem
" herbam referentis, ſubſalſi, obſcure alcali urinoſi, abſque ullo acidi indicio
" ℥viiiß. gr. xxiv. humoris turbidi albicantis, primo leviter fœtentis, ſubſalſi
" et urinoſi, deinde magis ac magis empyreumatici, alcali urinoſi manifeſte,
" ac tandem ſale volatili urinoſo copioſo imprægnati ℔iv. ʒvijß. ſalis vol. uri-
" noſi concreti gr. L. olei ʒv. carbonis ℥iiß. gr. xlviij. qui rite calcinatus re-
" liquit cinerum ℥iß. ex quibus ſalis fixi mere alcali ʒiv. gr. xlvi. lixivio ſunt
" extracta. Partium jactura in diſtillatione fuit ℥iij. ʒi. gr. lviij." (tom. iii. 644.) Erat terræ ʒvij. gr. xxvi. *N.B.* From the capitum cum radicibus, ℔v. compared with the former, were got humoris $\frac{8}{9}$ or about $\frac{1}{9}$ leſs; Salis vol. quadruple, or $\frac{4}{1}$. olei $\frac{5}{3}$. cinerum $\frac{3}{5}$. ſalis fixi $\frac{2}{100}$. terræ $\frac{1}{2}$. nearly. But the jactura was little more than $\frac{1}{7}$. Hence they do not appear to be both accurate; and if the ſum of all the principles with the jactura be caſt up, it comes to ℔iv. ℥vi. only. So ℥x. are wanting. — What follows is of more conſequence, and of more general uſe.

" Decoctum lactucarum aquâ coctarum tranſcolatum, et ad extracti liquidi,
" ſeu ſyrupi conſiſtentiam, in vaſe aperto igne, redactum, in diſtillatione li-
" quorem primo acidum auſterum, deinde empyreumaticum, urinoſum et ſale
" alcali urinoſo copioſo imprægnatum præbuit. Unde concludere licet ſales
" volatiles urinoſos plantarum, cæteris principiis involutos, neque diuturna
" coctione, neque lenta humoris evaporatione in vaſe aperto exhalari; imo for-
" tiori igne indigere ut evolvantur, aut potius fortaſſe ut producantur." (tom. iii. 646.) See a like obſervation by him on the analyſis of tartar. M. M. ii. p. 760. Had he known, or conſidered this from the beginning, he would not have attribued the virtues of a great number of ſimples to, or explained them by, the volatile ſalt, which can be by fire obtained from them. Nevertheleſs his concluſion is too general, and does not hold in all, particularly in the acria volatilia, from which volatile ſalt can be got more eaſily; and diſcovers, and acts as in ſuch a manner, even while cæteris principiis eſt involutus. Can any volatile ſalt be obtained from the extractum cochleariæ, raphani ruſticani, ſinapi, allii, ari, &c.

" Mirum ſane eſt hanc plantam aquoſam, et fere inſipidam, tantam ſalis
" volatilis urinoſi copiam, in analyſi præbere, ut plurimas longe ſapidiores,
" hujus ſalis copiâ ſuperet. In ea ſal acidus alcali urinoſo ita obruitur, ut in
" nonnullis analyſibus vix detegi poſſit, et ſuccus lactucæ chartæ cæruleæ co-
" lorem non mutet. Vel potius ſal eſſentialis nitroſus hujus plantæ, ſalipe-
" træ prorſus ſimilis, vel ſalſus eſt, qui nullam acidi aut alcali indicium præ-
" bet; at diſtillationibus per ignem, in alcalinum ſalem, tum fixum tum vo-
" latilem, fere totus convertitur." *Geoff.* Ib. So that he ſeems to think there muſt be an acid in every plant, whether diſcoverable or not.

" His lactucæ analyſibus academici Pariſienſes primario deprehenderunt
" quoſdam liquores ex plantis diſtillatos, acidi et alcali ſalis notas indiſcri-
" minatim præbere; nempe cum aliis liquoribus, acidis aut alcalinis, per-
" miſtos, pariter ebullire, cyaneam Heliotropii tincturam rubram efficere, et

" limpidam mercurii ſubl. cor. ſolutionem turbidam, lacteam, vel etiam ſpiſ-
" ſam et grumeſcentem reddere, ac ut aiunt præcipitare. Quibus experimen-
" tis acida et alcalia in ejuſdem liquoris ſinu, pacifice, et ſine ulla efferveſ-
" centia, aut mutua lucta ſæpius recondi." *Geoff.* iii. 647. Here he ſeems to own that he owes the analyſes to the academy. Whether the errors are owing to the correctors, I know not; but in the analyſes lactucæ romanæ, the ſum total is neat ʒxiij. leſs than the quantity analyſed.

The doſe need not be determined. We keep no preparation of it. The aqua ſtillatitia, is but good water. The extract might be uſeful. The ſeeds may be made into an emulſion like poppy-ſeeds; but they are never uſed here. " Aqua lactucæ diſtillata ſervatur in officinis, quæ utilis eſt ubi refri-
" geratione et humectatione opus eſt, et in julapiis et potionibus refrigeran-
" tibus recipitur. Emulſio ex ſeminibus lactucæ, in ejuſdem aqua parata,
" cum ſyrupo nenupharis, aut Altheæ, urinæ ardorem mitigat, quietem noc-
" turnam accerſit, et venerea inſomnia pellit." *Geoff.* (iii. 654.) who employs 15 pages on the lettuces.

L A M I U M.

S E C T. I.

Lamium. Lamium album, urtica mortua. *Off.* Lamium, album, non fætens, folio oblongo. *B. P.* 231. Lamium album. *Ger.* 702. *R. H.* 559. *Syn.* 240. L. vulgare, album; ſive archangelica, flore albo. *Park.* 604. *H. Ox.* iii. 384. *T.* 183. Galeopſis, ſive urtica iners, floribus albis. *J. B.* iii. 322. Urtica iners, ſive lamium primum. *Dod.* 153. Lamium, foliis cordatis, acuminatis, ſerratis, petiolatis. *H. Cliff.* 314. White archangel, or Dead nettle.

It grows in plenty by hedges, in thickets, &c. flowering in May. The herb and flower are uſed. " *Officin.* Herba cum floribus." *Schrod.* 705. " Her-
" ba, flores." *Ph. Ed.* " Flores." *Ph. Lond.* " Urtica . . . . Quæ innoxia,
" morſu carens, lamium vocatur." *Plin.* l. 21. c. 15. p. 554. " Lamium, ex
" *lamio*, *Ioniæ* monte: quod ad lamas naſcatur." *Martin.* (Dict. Cambr.)
" Lamium dictum nonnullis putatur a florum cucullata effigie, larvatam la-
" miam quodammodo repræſentante. "*R. H.* Although this is not the lamium *Plinii* l. 22. c. 14. p. 571. nor galiopſis *Dioſcoridis* l. 4. c. 95. p. 280. yet probably it is a ſpecies of the ſame genus, and not much different in qualities.
" Galiopſis, quam alii galeobdolon vocant, toto frutice cum caule et foliis
" urticam refert. At leviora ſunt folia, et valde gravem odorem trita red-
" dunt: flores vero tenues ſunt, ac purpuraſcentes. Naſcitur circa ſepes,
" ſemitas, ædificiorumque areas ubique." *Dioſcor.* l. 4. c. 95. p. 281.

" Varia genera urticæ mortuæ paſſim obſervantur, colore, odore, figura,
" et ſimil. differentia. Datur fœtida et non fœtida; maculata et non macula-
" ta; flore purpureo, albo, luteo. Primas autem præ cæteris dant fœtidæ,
" ac præcipue maculatæ. Huic ſurrogari tamen non nequit fœtida non ma-
" culata." *Schroder.* 705.

SECT.

SECT. II.

It is emollient and reſolvent; called vulnerary: and is recommended for wounds, ulcers, obſtructions of the viſcera, but as a ſpecific for the fluor albus. I never knew it uſed here.

" Urtica mortua ſeu galiopſis calfacit et ſiccat. Præcipue commendatur " quæ flore purpureo, ad dyſenteriam (decoctum propinatum): flores albi " ad fluorem album ſpecifice celebrantur. Exſtrinſecus medetur urtica pano, " &c. *Præp.* conſerva ex floribus albis." *Schroder.* 705.

1. It is of an herbaceous, ſweetiſh taſte, and ſomewhat fetid. Summitatum floridarum thea has the ſame taſte and a greeniſh ſmell: it reddens very little a ſolutio heliotropii: and a ſolution of vitriol turns it green, but not opake, neither precipitates any thing after even ſix hours: after it ſtood macerating 8 or 10 days it ſmelled acid. — 2. By the analyſis it ſeems to contain a large quantity of oil and eſſential ſalt. " Analyſi chymica ex plantæ " floridæ, demptis radicibus, ℔v. prodierunt humoris ℔iv. ℥v. ʒi. gr. vi. " olei ʒij. ʒi. carbonis ʒv. ʒi. unde cinerum ʒiiß. gr. xlii. ac inde ſalis fixi " alcali ʒix. gr. xii. (ergo terræ ʒxi. gr. xxx.) et jactura fuit ʒiijß. gr. lxvi." Secundum *Geoff.* iii. 658. who adds, " lamii ſuccus chartam cæruleam vix " mutat. Salem eſſent. tartareum continere videtur, multo ſulphure bitumi- " noſo implicitum. Ab hoc ſulphure potiſſimum ejus vis balſamica depen- " det . . . . Quotidiana experientia in fluore albo et hæmorrhagiis uterinis, " ejus flores et folia utilia apud nos deprehenduntur. Summitates floridæ " in aqua fervida macerantur, et unus aut alter cyathus bis terve in die hau- " ritur. Vel ex iiſdem juſcula cum portulacæ foliis parantur. Aut ex flo- " ribus cum ſaccharo conditum, ſeu ut aiunt conſerva coquitur, ſingulis die- " bus ad ʒi. ſumenda." This conſerve, tho' every where commended, has not yet been admitted into the Britiſh Diſpenſatories.— 3. It is alſo commended as a diſcutient of hard tumors, tho' ſcrophulous. " Herba, tuſa et im- " poſita, valere creditur ad tumores quoſcunque diſcutiendos, necnon ad in- " flammationes, plagas, ulcera putrida et vulnera; ad ſcrophulas aperiendas, " &c." *R. H.* 559.

LAVANDULA.

SECT. I.

1. Lavendula, lavendula latifolia. *Off.* Lavandula latifolia. *B. P.* 216. *T.* 198. Lavandula, *Dod.* 273. L. flore cæruleo. *Ger.* 583. Lavendula major, ſive vulgaris. *Park.* 72. *R. H.* 512. *H. Ox.* iii. 352. Pſeudo-nardus, quæ vulgo ſpica. *J. B.* iii. 281. Lavendula *Offic.* . . . . Spica officinarum *Germaniæ. Dale* 141. Lavendula, foliis lanceolatis integris, ſpicis nudis. *H. Cliff.* 303. The moſt common or broad-leaved lavender. *R. H.*

It grows freely in Languedoc, Spain, and Italy. " It is planted in gar- " dens; but is ſeldom met with in England; and never preſcribed in the

" ſhops." *Miller Bot.* 422. Here (in Scotland) it is as common as the following, or other lavender. " The broad-leaved lavender, tho' very common " in moſt parts of Europe, yet in England is rarely to be found, notwithſtanding it is as eaſily propagated as any of the other ſorts." *Miller's Dict.*

2. Lavendula anguſtifolia: ſpica vulgaris. *Off.* Lavandula anguſtifolia. *B. P.* 216. *T.* 198. Lavandula altera. *Dod.* 273. L. minor, ſive ſpica. *Ger.* 584. Lavendula minor, ſive ſpica. *Park.* 73. *R. H.* 512. *H. Ox.* iii. 352. Pſeudo-nardus, quæ lavendula *vulgo. J. B.* iii. 281. Spica, ſeu lavendula vulgaris. *Offic.* Common lavender, or ſpike. *Dale.* 141. Varietas prioris eſt *Linn. H. Cliff.* 303. Narrow-leaved or ſmall lavender; by ſome Lavender-ſpike. *R. H.*

" This is the lavender which grows every where in our gardens, and is " commonly uſed; the broad-leaved being rarely to be met with, and that " only in ſome gardens of the curious; though Gerard, Parkinſon, and even " Mr. Ray, took the broad-leaved to be our common lavender." *Miller Bot.* 259. " Spica mas, inſigniter lavandula latifolia. *C. B.* 1. Spica fœmina, la- " vandula, dicitur lavandula anguſtifolia. *C. B.* 2. Non diſcrepant niſi mag- " nitudine, quæ tam florum, quam foliorum, in ſpica major eſt, in lavandu- " la minor. Odor itidem ſpicæ gravior eſt, lavendulæ gratior, ideoque pro- " miſcue uſurpari poſſunt. Nobis vulgatior eſt ſpica fœmina." *Schrod.* 685. " Lavendula duplex eſt, altera folio anguſto, quæ Italica dicitur, ſpica, vel " ſpica nardi officinarum; alia lato, quæ Germanica, quæque generis nomen " retinet, ab uſu in balneis." *Hoffman.* p. 373.

It grows with the former. In gardens they flower in July. The herb, or leaves and young ſhoots, and flowers, of either indifferently, are uſed. " Stæchas " Arabica Meſuæo dicitur. Pſeudo-nardus *Plinii* l. &c. 12. cenſetur. Alii " ſtæchadi veterum cognatum faciunt: alii cneorum, ſive caſiam albam The- " ophraſti volunt: quidam Iphium Plinii ſuſpicantur." *B. P.* The *New Lond. M. M.* retains only the lavendulæ anguſtifoliæ *B. P.* flores.

SECT. II.

They are ſtimulating attenuants, diaphoretic, and carminative, or acrid aromatics; called cephalic, nervine and uterine; and commended in vertigoes, lethargies, palſies, ſpaſms, convulſions, colics, female obſtructions, hard labour, vapours, &c.

" Calfacit et ſiccat 3. (prævalet tamen ſpica) ſaporis ſubacris ac ſubamari, " partium tenuium, cephalica eſt, ac nervina. *Uſus præcip.* in catarrhis, pa- " ralyſi, ſpaſmo, vertigine, lethargo, tremore artuum. In urina, menſibus, " ac fœtu pellendo (unde et parturientibus exhiberi ſolet), in torminibus ven- " tris flatulentis. Extrinſecus in lixiviis, pro capitis & artuum affectibus, in " maſticatoriis, pro catarrho exſiccando, et revellendo ad palatum, ne ad " pulmones defluat. *N. B.* Odore ſuo fugat pediculos. *Præpar.* 1. Conſerva " florum. 2. Confecti flores. 3. Aqua ſtillat. ex floribus. 4. Oleum ſpicæ, " cum aqua aſcendens. Uteri motus ac dolores compeſcit, umbilico illitum." *Schrod.* 686. Stimulans aromaticum eſt. *Boerh. Lib. de M. M.*

1. They are of a warm bitteriſh aromatic taſte, and fragant ſmell. " Folia

" ſpicæ

" ſpicæ, odoris vehementis, grati, ſaporis amaricantis. Lavendulæ folia odo-
" re adeo vehementi prædita non ſunt." *J. B.* " Lavendula . . . . odoris
" fortis et grati: ſaporis amari, calidi et acris." *Nucl. Belg.* 168. Summitatum thea is ſomewhat aromatic, tho' to me not very agreeable, and bitteriſh, leaving behind it a flavour like that of bitter almonds: it only dilutes ſyr. violarum; makes little change on the ſolutio heliotropii; and a ſolutio vitrioli turns it to a dark brown; and ſoon precipitates a dark grayiſh ſediment. An itaque tam ſalutaris? — 2. They yield a ſingular kind of eſſential aromatic oil, called oleum ſpicæ; which (according to *Mem. Acad.* 1715.) abounds moſt in the flower-cups. — 3. Analyſi chymica ex ſpicarum floridarum lavendulæ (anguſtifoliæ) ℔v. prodierunt humoris (primo ſubacidi, dein magis ac magis acidi) ℔iij. ℥xiv. ʒvii. gr. liv. (of which the laſt ℥iij. ʒij. were ſale vol. urin. copioſo impregnatæ, nec non acidæ). Olei ℥iijß. ℈i. carbonis ℥vii. ʒvii. ℈i. unde cinerum ℥ij. ʒv. ac inde ſalis fixi alcali ʒvii. gr. xlvi. (ergo terræ ℥i. ʒv. gr. xxvi.) et jactura fuit ℥vß. gr. xviii. ſecundum *Geoff.* iii. 685. who adds, " Lavendula ſalem obtinere videtur eſſentialem ammoniacalem, ſimilem ammo-
" niacali compoſito ex ſale vol. urinoſo, aceti acido plus quam ſaturato, cum
" oleo copioſo, tum eſſentiali tum craſſo, accurate permiſto. Idem dicendum
" de ſpica (that is lav. latifolia with him) quæ iiſdem gaudet principiis, imo
" copioſioribus et penetrantioribus, ut ejus odor teſtatur, et ſimilibus virtu-
" tibus donatur. Quapropter indiſcriminatim ad uſum medicum uſurpan-
" tur. Hic vero lavendula, utpote magis familiaris, frequentius in uſum
" venit. Oleum eſſentiale ſpicæ et lavandulæ heliotropii tincturam rubore
" inficit, ratione ſalis acidi contenti." *An recte?* — 4. It is much commended, and perhaps more than it ought uſed; not only as an acrid aromatic, and ſo hurtful in hot and inflammatory diſeaſes of the head, as well as of other parts; but as containing a ſpirit, ſomewhat of the nature of that in the laurel, or bitter almonds; and, like the aqua ceraſorum nigrorum, noxious in theſe diſeaſes, wherein it is moſt commonly preſcribed. What *Hoffman* ſays of the lillium convallium is more applicable to this plant. " Aqua diſtillata flo-
" rum diſcutit, aperit, attenuat, inſigniter. . . . Non mirum igitur ſi aqua,
" præcipue illa quæ cum vino paratur, valde laudatur in ſyncope, omnique
" partium principum corroboratione. Verum enimvero ſcire oportet, niſi de-
" bilitas ſit ab intemperie frigida, ſive nuda, ſive cum frigidis humoribus vias
" obſidentibus, nihil fieri. Ubi enim a caliditate tale quid eſt, inſignem contra
" oportet expectare læſionem." *Hoffman.* p. 315. Vide *Dod.* p. 274. or *Geoff.* iii. 687. where he is quoted at large; as is alſo an inſtance of an apoplexy brought on, as was ſuppoſed, by a ſtrongly aromatic cucupha, which required 6 or 7 V. S. to cure it, from *Sim. Paulli.* " In balbutie, et linguæ paralyſi
" ſpiritu vini lavendulato os ſæpius abluitur. Rulandus in curationibus em-
" piricis, teſte Etmullero, beneficio hujuſce ſpiritus virum 70 annorum, apho-
" niâ laborantem curavit, cochlear unum pro doſi propinando." *Geoff.* iii. 688.
" Quædam annorum 68 linguæ paralyſi laborans, infundebat per noctem flo-
" res lavendulæ, in vino aduſto, vel ſublimato (that is in brandy): cujus infuſi
" ℥i. mane et ante introitum lecti, aſſumebat per aliquot dies, ac ſtatim recte
" loqui indies cœpit." *Mart. Ruland.* cur. empir. (Budiſſæ 1680. in 8vo.) p. 85. and this is the only cure our authors can refer to. How accurately quoted is evident! " In difficili partu ſemen lavandulæ eſt oppido conducibile . . . .

" Obiter tamen hic notandum eſt, calida hæc acria et vehementiora medica-
" menta ad partum juvandum non proficere, niſi in debilitate virium et parti-
" um atonia, quæ quidem minus frequenter occurrit, quam ſumma partium
" rigiditas, intumeſcentia et ardor &c." *Geoff.* iii. 688. The two compound powders he gives you have in *R. H.*

SECT. III.

They may be given in ſubſtance to ʒi; in infuſion to ʒij; the conſerva florum to ʒß; ſpiritus compoſitus to ʒii. (which contains more than gr. v. oleorum eſſentialium) tho' ʒi. is enough at a time; and it is ordered by drops, commonly xl. l. lx. The flowers are in the aqua pæoniæ compoſita; and the eſſential oil in the ſpiritus lavendulæ compoſitus, ſpiritus ſalinus aromaticus, et emplaſtrum cephalicum.

" Pulvis florum, vel ſemina contuſa a ℈i. ad ʒi. præſcribuntur. Infuſum
" florum theæ adinſtar præparatur. Aqua diſtillata ſimplex vel ſpirituoſa,
" tinctura florum cum ſpiritu vini parata ad ʒij. treſve, (a large doſe indeed!)
" conſerva ex floribus ad ʒß. et oleum eſſentiale ad guttas ij. iij. vel vi. intus
" ſumitur." *Geoff.* iii. 686.

The ſpiritus lavendulæ compoſitus has long been a famous medicine in England, and undergone many alterations. The oldeſt receipt I have of it is that in *Culpeper's* Diſpenſatory (edit. 1653.) p. 63. in which are 30 ingredients; which are merrily enough, as well as ſatyrically animadverted on, by that author: who after ſeveral queries ſays, " *To make it is a taſk almoſt, if not alto-*
" *gether, as hard as to piſs down Paul's.*" However, this receipt kept its place, with the loſs only of two of its ſimples, viz. jujubs and emeralds, until the edition 1721. when other two of the ingredients only were lopt off, viz. peony ſeeds and pearls. But the *Committee* of late went roundly to work; ſo that now there are in *Pharm. Lond.* a ſpiritus lavendulæ ſimplex, of which, with ſp. roſmarini, cinnamon, nutmeg and red ſaunders, the compound ſpirit is prepared. The *Edinb.* Diſpenſatories alſo ſhew our College is not too old to learn. *Compare Edit.* 1722. 35. and 44.

The oleum ſpicæ in Provence is diſtilled from the flowers of the lavendula latifoila. *B. P.* " The beſt oil d'aſpic brought from Provence, contains
" ¾. either of ſpirit of wine, or oil of turpentine. By burning a little of
" the mixture, on a bit of paper, or in a ſpoon, the oil of turpentine, if in it,
" may be diſcovered, becauſe it ſmokes more, and varniſhes the ſpoon more,
" than the genuine oil: and if mixed with ſpirit of wine, by pouring it into
" water, for thus the oil ſeparates from the ſpirit, and ſwims above. The
" common oleum ſpicæ of the ſhops, is only the oil of turpentine perfumed
" with a ſmall quantity of the true eſſential oil." Vide *Obſervations on the oil d'aſpic*, by *Mr. Geoffroy* junior, *Mem. Acad.* 1715. p. 321, &c. It is uſed in varniſhes, enamels, &c. more than in medicine. The Laboratory here prepares a conſiderable quantity of it, and ſells it genuine and free of all mixture.
" Oleum ſpicæ lavandulæ diſtillatum, ex Gallo-provincia et Gallia-narbo-
" nenſi, ubi utraque lavandula uberrime creſcit, ad nos affertur, ſed ſæpius
" adulteratum, et cum ſpiritu vini aut cum oleo terebinthinæ permixtum.

" Mangonium utrumque facile detegitur. . . . Apud varios artifices uſitatiſ-
" ſimum eſt, præſertim ad opera varia vernigene illinienda." *Geoff.* iii. 690. Why does not *D. Petrus Magnol*, in his *Botanicum Monſpelienſe* (edit. Monſp. 1686. in 8vo.) mention the lav. anguſtifolia, if it is common there? " La-
" vendula latifolia. *Pin.* Pſeudonardus, vulgo ſpica *J. B.* veſtiuntur plerique
" montes in Gallia Narbonenſi, et campi deſerti levendula, Junio, Julio, ac
" etiam autumno florente.". *Bot. Monſp.* p. 151. But not a word is ſaid of the lav. anguſtifolia. Is the latifolia the planta naturalis?

" Hoc oleum in nervorum ac tendinum relaxatione, in paralyticis et rhu-
" maticis affectionibus, plurimum prodeſt, ſive interne gut. ij. iij. vi. ve
" ſaccharo affuſæ propinentur in vino aut aqua cardiaca aut cephalica qua-
" cunque: ſive cum ſpiritu vini, oleis, aut unguentis quibuſcunque conveni-
" entibus illinatur. . . . Hujus olei odorem fugiunt blattæ, pediculi, et alia
" inſecta. Propterea in his fugandis vel enecandis apprime conducit." *Geoff.* iii. 689. 690. Where is an inſtance of the bad effect of a mercurial litus for the pediculi inguinales. " Spicæ autem oleum, tam penetrantis eſt odoris, ut
" ego toto corpore abominer. . . . Conſerva eſt inſigne capitale, ſed ingra-
" tum." *Hoffman.* p. 373. *par.* 17. The conſerva florum, formerly in our Pharm. was omitted in the edition 1744: probably it may be reinſerted in the next; ſince retained in the *New London Diſpenſatory*. But it is not in edit. 1756.

LEUCOIUM.

SECT. I.

Leucoium. Leucoium luteum. Cheiri. *Offic.* Leucoium luteum, vulgare. *B. P.* 202. *T.* 221. *H. Ox.* ii. 243. L. luteum. *Dod.* 160. L. luteum *vulgo* cheiri, flore ſimplici. *J. B.* ii. 872. *R. H.* 782. *Syn.* 291. L. floribus luteis, keiri *Arabum. Lob.* 179. Viola lutea. *Ger.* 456. Keiri, ſive leucoium ſimplex, vulgare. *Park. par.* 257. Cheiranthus, foliis lanceolatis, acutis, glabris. *H. Cliff.* 334. The common wall-flower; *vulgo* Roman violets.

It grows in great plenty on old walls, buildings, &c. flowering almoſt all the year round, in one place or other. The flowers only are uſed. But the ſeed alſo, and root, are ordered in *Hippocrates*, as medicinal: flores et ſemen: *Dioſcorid.* flores, ſemen, frutex, et radix. in *Galen.* " *Officin.* Flores, ſeu
" herba cum floribus, et raro ſemen. Creſcit nobis in hortis, raroque ſponte
" provenit." *Schrod.* 564. Leucoion ſignifies viola alba; Keiri is *Arabian.*
" Leucoion vulgaris eſt notitiæ, ſed eſt in floribus differentia. Namque aut
" albi, aut lutei, aut cærulei, aut etiam purpurei reperiuntur. Eſt porro
" leucoium luteum, inter cætera, præcipui in medicina uſus." *Dioſcorid.* l. 3. c. 138. p. 230.

SECT. II.

They are antacid, acrid, detergent, diuretic and menagogue; called cordial, nervine, and uterine; and commended chiefly in female obſtructions,

hard labour, retentis secundinis; also for the palsy, &c. cum alliaria fere convenit planta.

" Cordiales sunt, calfaciunt et siccant 2. attenuant, discutiunt, partium sunt " tenuium, extergunt, nervini sunt, dolores mitigant, menses cient, secundi- " nam proritant. *Præp.* 1. Conserva ex floribus. 2. Aqua, ex floribus vel in- " tegra planta. 3. Oleum, ex infusis floribus in oleo veteri." *Schrod.* 564.

1. The flowers are of a disagreeable bitter taste; and fragrant sweet smell. Herbæ thea is a little tinctured, of a nauseous bitter taste, and an unpleasant faint scent: it reddens not syr. violarum, nor solutio heliotropii: ol. tartari turns it greenish, but not fetid; and the solution of vitriol makes it orange-coloured, but not opake. " Folia sunt saporis subacris; flores valde odorati, " sapore mihi ingrato; semen gustu acri et amaro." *J. B.* " This plant is " bitter and of an herbaceous saltish taste, it reddens (*assez*) the blue paper. " By a chymical analysis, besides several acid liquors, it yields some volatile " salt, much oil and earth: so it is full of sal ammoniac, sulphur and terrestrial " parts." *T. Hist.* p. 480. " Flores potissimum in usum veniunt. Keiri so- " lia saporis sunt amari, herbacei, subsalsi, et eorum succus chartam cæruleam " rubro colore tingit. . . . Keiri scatet sale ammoniaco, cum multo sulphure, " tum tenui tum crasso conjuncto." *Geoff.* iii. 640. Thus he copies, but names not *T.* — 2. It comes near to the alliaria and nasturtium aquaticum in character; but differs much from them in smell; on which its cordial virtues are founded. Does the sweet scent continue, or rise in distillation? — 3. This plant, and especially the flowers, have been always much commended in womens diseases; and used both outwardly and inwardly. They are commended also for the green-sickness, jaundice, apoplexy, rheumatism: and why not scurvy also? It is one of the three famous aristolochies in Hippocrates (vid. *Artemisia*), and is often used by him, and the root and seeds as well as flowers. " Ferunt hoc semen, magna dosi sumptum, non solum fœtum vivum pellere, " sed vivum enecare, et enecatum ejicere." *Geoff.* iii. 641. " Episcopus Tri- " dentinus ad preservationem ab apoplexia et paralysi, feliciter utebatur con- " serva florum cheiri in aqua sua propria adsumpta. *D. Soame*, ex *Obs. Reus-* " *neri.*" *R. H.* Vide *J. B.* ii. 871.

" Analysi chymica, ex florum keiri ℔v. prodierunt humoris ℔iv. ℥vij. ʒv. " gr. xlii. olei ʒi. ʒvii. gr. xxxvi. salis vol. urinosi ʒi. gr. xxx. carbonis ℥iv. " ʒijß. unde cinerum ℥i. ʒijß. et inde salis fixi salsi ʒiv. gr. xxiv. (ergo " terræ ʒvi. gr. xii.) ac jactura fuit ℥j. ʒvii." Secundum *Geoff.* iii. 641. The first humoris ℥vii. or vi. were fere inodoræ et insipidæ, yet obscure acidæ; and nothing alcaline or urinous appeared till the last two or three ounces: all the rest was more and more acid; yea the very last ounce but one, was humoris manifeste acidi, et nonnihil alcali urinosi: which seem to want confirmation.

SECT. III.

They may be given in powder to ʒi. in infusion to ʒii. in conserve to ℥i. We keep no preparation of it. It is too common to be much valued.

" Folia et flores ad M. 1. macerantur per 24. horas in vini ℔j. pro duabus " dosibus

" doſibus mane et ſero propinandis: vel in aqua communi decoquuntur ad " viſcerum obſtructiones. Semen ad ʒi. vel ʒij. intus ſumitur. Oleum per " infuſionem ex floribus potenter reſolvit, et rheumaticos dolores ſedat. Eo- " dem in Italia ad facilitandum partum regio pubis inungitur." *Geoff.* iii. 641.

LEVISTICUM. *Vide* Roots.
LILIUM ALBUM. *Vide* Roots.

LILIUM CONVALLIUM.

SECT. I.

Lilium convallium. *Offic.* Lilium convallium, album, *B. P.* 304. *T.* 77. Lilium convallium. *Dod.* 205. *Ger.* 410. *R. H.* 667. *Syn.* 264. L. convallium *vulgo. J. B.* iii. 531. *H. Ox.* iii. 539. Lilium convallium, flore albo. *Park.* par. 349. Liliago. *Bot. Par.* 116. Convallaria, ſcapo nudo. *Fl. Lap.* 79. *H. Cliff.* 124. Convall-lillies, or May lillies; in ſome places liriconfancie. *Ger.* Lilly-convally, or May-lilly. *R. H. vulgo* Lilly of the valley.

It grows in heaths, woods, hilly and ſhady places, flowering in May. The flowers are uſed, and alſo the root. " *Officin.* Soli flores, raro radix." *Schrod.* 616.

" Lilium, quod a loco natali convallium appellatur, a quibuſdam lilium " vernum Theophraſti 6. *Hiſt.* 7. cenſetur. Alii œnanthen ejuſdem. l. 6. c. 7. & Athenæi volunt." *B. P.* Vid. *Hoffman.* p. 315.

SECT. II.

They are attenuant, deobſtruent and diuretic, or deterſive and aromatic; called cephalic; and commended in vertigoes, apoplexy, palſy, epilepſy, fainting, &c. and outwardly as errhine and ſternutatory. The root and leaves are much of the ſame nature with the flowers.

" Calfaciunt & ſiccant, cephalici ſunt. *Uſus præcip.* in morbis capitis fri- " gidis, ut apoplexia, paralyſi, vertigine, epilepſia. Hinc in lipothymia. In- " ſigne itidem errhinum exhibent pulveriſati. *Præpar.* 1. Aqua ſimplex, ex " floribus. 2. Spiritus vini liliatus, ex floribus cum vino vel malvatico diſtil- " latis. 3. Spiritus liliorum, ex floribus fermentatis diſtill. 4. Conſerva, ex " floribus. 5. Oleum, ex infuſione florum recentium in oleo veteri. 6. Pul- " vis ſternutatorius, ex floribus pulveriſatis." *Schrod.* 616. Inter ſtimulantia aromatica eſt in *Boerh. Lib. de M. M.*

1. Theſe flowers are of a pretty bitter, and ſomewhat diſagreeable taſte, and fragrant ſweet ſmell. The roots are ſweetiſh at firſt, then diſagreeably bitter, and ſmell ſweet, but not like the flowers. " Flores ſunt odoris ſuaviſſimi, ſa- " poris amaricantis: radix dulcis & aromatica eſt *Camerario.*" Secundum *J. B.* " Odor florum fragrantiſſimus, & pene indicibilis, & ſunt amariſſimi. Radix " eſt odorata & aromatica, ſternutamentis appetita, ut *Camerarius* ſcribit." *Hoffman.* 315. " The flowers analyſed, after a long maceration, give ſeveral

" acid liquors, much volatile ſalt, and a great deal of oil; with ſome earth: " ſo ſeem to contain much ſal ammoniac. They are aperitive, &c." *T. Hiſt.* p. 485. — 2. The flowers, and root alſo, make excellent ſnuff, tickling the noſe and cauſing ſneezing effectually, without any uneaſineſs or pain, and which ceaſes at pleaſure, by blowing it out. The root was an ingredient in the pulvis cephalicus, and for common uſe the beſt of the five; but was expelled with roſemary in 1744. — 3. The flowers in conſerva, aqua ſtillatitia, & ſpiritus, are commended in lowneſs of ſpirits, weakneſs of the vital functions, &c. " Quinimo aquam ſtillatitiam jamjam animam expirantis ori inſerunt, rati ex " ejus aſſumptione homines morientes in vita retineri poſſe per pluſculum tem- " poris ſpatium." *Matthiol.* p. 631. *Vide* Thea.

" Analyſi chymica ex florum recentium ℔v. prodierunt humoris ℔iv. ℥vi. " ʒv. ſalis vol. urinoſi ʒi. gr. x. olei ℥ij. ʒiij. gr. iv. carbonis ℥ij. ʒiij. unde " cinerum ʒix. gr. xvi. ac inde ſalis fixi alcali, ʒv. (ergo terræ ʒiv. gr. xvi.) " & jactura fuit ℥vi. ʒvi." (rather ℥ij. ʒiij; as the whole makes ℔v. ℥iv. ʒiij.) " ſecundum *Geoff.* iii. 726. " Etmullerus obſervat odoras florum particulas " in oleum eſſentiale nulla arte redigi poſſe. Obſervat inſuper flores ſimplici " diſtillatione, abſque prævia fermentatione, phlegma præbere minus odorum, " quam ſi prius fermentati fuerint. Nam poſt fermentationem, ſpirituoſum " liquorem fundunt ſubtilem, fragrantem. Quin etiam odorem ſuum magis " expandunt, eodem notante, ſi recenter collecti, in ſp. vini rectificatiſſimo ma- " cerentur & diſtillentur." *Geoff.* ibidem. He gives them a ſal eſſentialis vitrolico-ammoniacalis; but for what reaſon I cannot find.

SECT. III.

They may be given in ſubſtance to ʒi. or ʒij. if not too bulky. We have no preparation of them; but they are one of the ingredients, whence the aqua pæoniæ compoſita is deſtilled; and were excluded the ſpiritus lavendulus comp. in 1744 only.

" Florum pulvis ad ʒi. aut conditum ad ℥ß. exhibetur. . . . Aqua diſtil- " lata ad ℥iv. ſpiritus ad ℥i. exhibentur." *Geoff.* iii. 727.

LINGUA CERVINA. *Vide* Adianthum.

MAJORANA.

SECT. I.

Majorana, Amaracus, Sampſuchum. *Offic.* Majorana vulgaris. *B. P.* 224. *T.* 199. *R. H.* 538. Majorana ſive marum. *Dod.* 270. M. majori folio, ex ſemine nata, *J. B.* iii. 241. M. major. *Ger.* 664. M. vulgaris, æſtiva. *Park.* ii. *H. Ox.* iii. 358. Origanum, foliis ovatis, obtuſis, ſpicis confertis, compactis, pubeſcentibus. *H. Cliff.* 304. Sweet marjoram.

Where it grows naturally I know not; but ſown in gardens it proſpers well enough, till the froſt kills it. It flowers in Autumn. The herb, or leaves and tops

tops are uſed. " *Officin.* Folia, ſemen." *Schrod.* " Herba." *Ph. Lond. vet* & *Edinb.* " Folia." *Pharm. Lond. novæ.*

" Amaracum *Diocles* medicus & Sicula gens appellavere, quod Ægyptus & " Syria ſampſuchum." *Plin.* l. 21. c. ii. p. 549. " Sampſucum in Cyzico " ac Cypro laudatiſſimum ; ſecundum locum ſibi vendicat Ægyptium. Voca- " tur autem a Cyzicenis & Siculis Amaracum. Herba eſt ramoſa, per terram " repens, foliis hirſutis ac rotundis, calaminthæ tenuifoliæ æmulis, vehemen- " ter ſuaveolens & calefaciens : nexilibus coronis inſeritur." *Dioſcor.* l. 3. c. 47. p. 192. Canit *Virgil. Æn. lib.* i. v. 695—8.

" At Venus Aſcanio placidam per membra quietem
" Irrigat : et fotum gremio Dea tollit in altos,
" Idaliæ lucos, ubi mollis Amaracus illum
" Floribus et dulci aſpirans complectitur umbra."

" Et *Theophr.* 1. *Hiſt.* 15. *Chiſt.* 1, & 7. Amaracum ſuffrutex eſt, & coro- " naria herba, minutis foliis condita ut ſerpillum, &c. . . . Majoranam eſſe " volunt." *B. P. An recte ?*

" Majorana unde ſit, niſi ſit a Germano *Mejerohn*, neſcio." *Hoffman.* 322. " Majorana, quod majores habeat vires quam quis facile crederit. Amaracus " ab amaraco puero quodam regio, notante ſervio ad Æneid. i. appellatur. " Σαμψυχον, eo quod odore hujus plantæ deliquium animi paſſi reſtituantur." *H. Ox.* " Majoranam nonnulli dictam volunt, quod majori curâ diligentiâque " quam cæteræ herbæ ſeratur colaturque, &c. *R. H.* p. 537. " Majorana " & amaracus ex a privativo, & μαραινω, marciſco, becauſe this plant is not " ſubject to decay, nor to rot, being naturally dry, and containing little phlegm. " Or elſe majorana, becauſe marjoram (marjolame) reſembles marum." *Lemery Dict.* 330. *Doctiſſime !*

SECT. II.

It is a mildly ſtimulating aromatic ; called cephalic, nervine, ſtomachic, uterine, &c. and is commended in all cold, phlegmatic, and flatulent diſeaſes. It is reckoned by ſome a ſpecific in lethargies.

" Calfacit & ſiccat initio 3. eſt partium tenuium, digerit, attenuat. *Uſus* " *præcip.* in affectibus capitis ac nervorum, hinc & uteri, & ventriculi ; ciet " menſes (in peſſario) ; confortat cerebrum, ejuſque flatus diſcutit ; errhina eſt " & apophlegmatiſans. *Præpar.* 1. Aqua, ex foliis recentibus. 2. Con- " ſerva, ex foliis ſeu ſummitatibus. 3. Oleum ſtillat. ex foliis. 4. Confec- " tio ſem. 5. Balſamus : fit ex oleo deſtillato." *Schrod.* 619. Antacidis, a- cribus aromaticis, ſcorbuticis lenioribus & uterinis, annumeratur in *Boerh. lib. de M. M.*

1. It is of a ſubacrid, aromatic taſte, ſcarcely bitteriſh ; and fragrant ſweet ſmell. " Folia. . . . ſapore acriuſculo, ſubamaro, aromatico & grato ; odore " fragranti." *J. B. R. H. Geoff.* " Odoris eſt valde aromatici, ſaporis calidi, " amari & acris." *Nucl. Belg.* 183. — 2. Summitatum thea is not very aro- matic ; dilutes ſyr. violarum ; makes little change on ſolutio heliotropii, and

turns

turns a ſolution of vitriol greeniſh and dark. — 3. Analyſi chymica, ex plantæ floridæ, demptis radicibus, ℔v. prodierunt humoris ℔iv. ʒvij. ſalis vol. urinoſi, ʒi. gr. lxii. olei ℥ij. ʒvii. gr. lxi. carbonis ℥v. ʒvi. unde cinerum ℥ij. ʒij. gr. xxiv. ac indi ſalis fixi alcali ʒij. gr. xxii. (ergo terræ ℥ij. gr. ii.) & jactura fuit ℥v. gr. lvii. (ſum ℔iv. ℥xv.) ſecundum *Geoff.* iii. 762. He adds, "Majorana ſalem eſſentialem obtinet ammoniacalem, cum multo oleo tum "tenui aromatico, tum ſpiſſo empyreumatico craſſo conjunctum. Humores "craſſos & viſcidos digerit & attenuat. Partium fibras torpidas & languide oſcillantes excitat, inertium ſpirituum diſtributionem juvat, ſanguinis "motum fermentativum vividiorem efficit. Cerebri nervorumque meatus "flaccidos & laxe ſubſidentes reſtituit & aperit. Auxiliatur cerebri & capitis "frigidis morbis. Valet ad pectoris vitia: ſtomacho utilis eſt: & ad uteri "flatus, cæteroſque ejuſdem frigidos morbos confert. Urinas & aquoſos humores ducit, menſes provocat. Jecinoroſos & lienoſos juvare dicitur. Cum "cæteris aromaticis uſurpatur in affectibus capitis & nervorum, paralyſi, apoplexia, vertigine, artuum tremore, ſpaſmis & atonia fibrarum nervearum, "ac ſpeciatim in catarrhis. Præ cæteris commendatur in coryza, & in olfactus læſionibus. Hartmannus, in Praxi-chymiatrica aſſerit in Majorana "deliteſcere perfectum arcanum pro olfactu abolito. Ejus pulvis ad ℈i. vel "ʒß. cum marmelada florum aurantiorum, quotidie mane jejuno ventriculo, "tanquam expertiſſimum remedium a nonnullis exhibetur, teſte Roderico a "Fonſeca." Thus *Mr. Geoffroy* flouriſhes on one of the leaſt efficacious of the aromatics; ſometimes conſiſtently with reaſon and experience, but often not; and to expoſe his miſtakes, it is ſufficient to quote his words. He next proceeds to its virtues as an errhine; to vindicate and explain the uſe and effect of aromatic cucuphæ, (*Vide* Lavendulam.) and give the virtues of the eſſential oil, in paralytic caſes both inwardly and outwardly uſed. "Vertici quoque capitis, (ſays he) illitum, reſtaurare olfactum amiſſum Etmullerus ſcribit."

"Odoratui reſtituendo præmiſſis univerſalibus, ſpecificum eſt extractum "majoranæ, ſi ſingulis diebus mane & veſpere ſumitur ad ℈ß. vel ℈i. Valet etiam ſal majoranæ per ſe, aut cum extracto, ad gr. vi. vel viii. ſæpius "in vino ſumptus. Itemque balſamus ejus, vel oleum, ſi ad gr. ii. vel iv. "quandoque ſumitur. Hæc penitus morbum tollunt." *Hartman. Prax. Chym.* c. 57. p. 129.

SECT. III.

It may be given in powder, infuſion, conſerve, or any way, ad libitum. The oleum ſtillatitium is ſeldom uſed internally, tho' a few guttæ on ſugar can do little prejudice. The leaves are in the pulvis cephalicus, aqua pæoniæ compoſita, trochiſci hedychroi pro theriaca, unguentum nervinum; and the oleum, in the ſpiritus lavendulæ compoſitus, & ſpiritus ſalinus aromaticus. It may be uſed in ſweetbags and powders by ſuch as like them. It is a common ingredient in the fagots of ſweet herbs uſed by cooks.

MAL A-

MALABATHRUM.

SECT. I.

Malabathrum, Folium, Folium Indum. *Offi.* Tamalapatrum, ſive Folium, cadegi *Indi*, i. e. Folium Indum, *Arabibus. B. P.* 409, 410. Malabathrum, & Folium Indum officinarum. *J. B.* i. 430. *R. H.* 1563. Folium Indum. *Garz. Cluſ.* ex. 177. Tamalapatra. *Ger.* 1534. F. Indum, ſive malabathrum. *Park.* 1585. The Indian leaf. — Of which formerly. Vide *Cinnamomum.*

MALVA.

SECT. I.

Malva, Malva vulgaris. *Offic.* Malva ſylveſtris, folio ſinuato. *B. P.* 314. Malva ſylveſtris, procerior. *Dod.* 653. M. vulgaris, flore majore, folio ſinuato. *J. B.* ii. 949. *T.* 95. M. ſylveſtris. *Ger.* 930. M. vulgaris, flore purpureo. *Park.* 299. M. vulgaris. *Park. R. H.* 599. *R. Syn.* 251. M. ſylveſtris, procerior, ſeu elatior rectave; flore majore, ſubrubente, aut purpureo, venis ſaturate purpureis picto; folio ſinuato. *H. Ox.* ii. 521. Malva, caule erecto; foliis fere palmatis, obſolete ſerratis. *H. Cliff.* 347. Common mallow.

It grows by the way ſides, walls, rubbiſhy places; flowering in June. The herb, flowers and ſeeds, are uſed. "*Officin.* Folia, flores, ſemen, radix." *Schrod.* 620. "Folia, flores." *Ph. Lond.* p. 12. The malva ſylveſtris, folio rotundo. *B. P.* or dwarf-mallow, is every way as good, and ſo is *Schroder's* malva: they may be uſed indifferently.

"Malva, quaſi molva, quod alvum molliat, ut inquit Feſtus ſecundum "tritum illum ſcholæ Salern. verſiculum dixerunt malvam veteres quia mol- "liat alvum. Gr. μαλαχη, ἀπο τȣ μαλασσειν, ob eandem rationem. Utrum- "que etymon improbat *C. Hoffm.* nec tamen meliora ſubſtituit." *R. H.* "Ab "emolliendo ventre dictam putant Malachin." *Plin.* l. 20. c. 21. p. 534. "The name of this herb ſeemeth to come from the Hebrews, who call it "in their tongue malluach, &c." *Ger.* 932. It is not deſcribed by *Dioſcorides*, l. 2. c. 144. p. 136.

SECT. II.

It is antacrid and emollient like althæa, with which it agrees in virtues, and is uſed the ſame way.

"Herba (folia & flores) moderate calfacit (aliis refrigerat) humectat, e- "mollit, lenit dolores, laxat alvum, urinæ acrimoniam mitigat. *Uſus præcip.* "in affectibus pulmonum, veſicæ, inteſtinorum, uteri, e. gr. phthiſi, tuſſi, "raucedine, calculo, eroſione veſicæ & inteſtinorum, in duritie uteri, febri-

" bus, &c. Extrinſecus in tinea capitis, (cum urina in lixivium cocta) in " tumoribus maturandis, doloribuſque ſedandis (cataplaſm.) in alvo lenienda, " dolore nephritico mitigando, (clyſter.) *N. B.* Semen & radix, iiſdem " pollent viribus, ſed uſus rarioris ſunt. Præferuntur nihilominus in medica- " mentis internis. Radix cocta furfures capitis cadere facit (lotione.) *Præp.* " Aqua ſtillatitia ex foliis & floribus. 2. Conſerva florum, verum rari uſus " eſt." *Schrod.* p. 620. " Viribus convenit fere cum althæa, ſed non eſt tam " mucilaginoſa." *Nucl. Belg.* 183.

1. They agree in taſte and ſmell, in botanical character nearly, in their mucilaginous juice, and almoſt in every thing. Only whereas the root of althæa is more mucilaginous than the herb; the herb of mallows is much more mucilaginous than the root, which is woody, and here never uſed.—2. Herbæ thea is of an herbaceous ſubviſcid taſte. Is does not redden ſyr. violarum nor tincture of turnſol. A ſolution of vitriol makes it browniſh, precipitating little and ſlowly. If it ſtand with the herb in it 4 or 5 days macerating, it becomes very viſcid and ropy. The dwarf-mallow tea gives the ſame phænomena, (as alſo that made of the flores malværoſeæ, ſave what depends on their colour) with very little difference. In a word, not a few ſpecies, and perhaps all, malvæ alceæ, and althææ agree in virtues. One of the firſt is the

Malva arborea, Malva roſea. *Off.* Malva roſea folio rubrotundo. *B. P.* 315. Hollyhocks: the flowers whereof are called ſubaſtringent; and commended in tonſillarum morbis, oris putredine, in gargariſm; and in fluxu menſtruo nimio. (*Schrod.* 620.) But it ſoftens and relaxes no leſs than the reſt; and its flowers are equally mucilaginous and antacrid. We make no uſe of it.

" Analyſi chymica ex foliorum & radicum malvæ vulgaris recentium ℔v. " prodierunt humoris ℔iv. ʒviiß. gr. lx. ſalis vol. urinoſi gr. xlviii. olei ʒij. " gr. xlii. carbonis ʒiv. unde cinerum ʒi. ʒvii. gr. xxvi. ac inde ſalis fixi al- " cali ʒvi. gr. lxii. (ergo terræ ʒviiiß,) & jactura fuit ʒij. ʒi. gr. lxvi." ſecundum *Geoff.* iii. 768. Hence in the analyſis malva differs conſiderably from the althæa. But ſo does alſo the analyſis corticis radicum altheæ, from that foliorum & ſummitatum. *Geoff.* iii. 69. So that no proof can thence be drawn againſt their agreeing in virtues. " Malva has the ſame virtues with althæa." *T. Hiſt.* p. 212. " Malvæ ſuccus chartam cæruleam non mutat nonnihil (*rather* " valde) glutinoſus eſt, & ſaporem herbaceum fatuum tantummodo refert. Sa- " lem eſſentialem obtinet ammoniacalem." &c. *Geoff.* iii. p. 768—772. & *R. H.* p. 599.

We have a conſerva florum malvæ. The folia are in the decoctum com. pro clyſtere, & decoctum emolliens pro fotu.

LECT.

LECTURE LVIII.

MARRUBIUM.

SECT. I.

MArrubium, Marrubium album, Praſium, Praſium album. *Off.* Marrubium album, vulgare. *B. P.* 230. *T.* 192. *Park.* 44. *H. Ox.* iii. 376. Marrubium. *Dod.* 87. M. album. *J. B.* iii. 316. *Ger.* 692. *R. H.* 556. *Syn.* 239. M. ſive praſſium album. *Tab. Ic.* 539. Marrubium denticulis calycinis ſetaceis, uncinatis. *H. Cliff.* 312. Common white horehound.

It grows by the way ſides, and in rubbiſhy places; flowering in June. The leaves are uſed; or the herb before it flowers: and *why not in flower?*—" *Offic.* " Folia ſola." *Schrod.* 621. & *Ph. Lond.* p. 13. " Herba." *Ph. Lond. veter. Ph. Edinb. Dale*, &c. " Marrubium plerique inter primas herbas commen- " davere, quod Græci praſion vocant . . . notius quam ut indicandum ſit." *Plinius* l. 20. c. 22. p. 536. l. 23. — " Genera ſunt duo. *Theophr.* 6. *Hiſt.* 1, " & 2. propoſuit: aliud folio herbido, inciſuris profundioribus, quo unguentarii " utuntur: alterum rotundius ſquallens, inciſuras habens obſcuriores, (praſi- " um innuere videtur)." *B. P.* " Sunt & πρασιᾳ duo genera. Aliud enim folio " herbido, ſerratiori, inciſuriſque profundioribus, & proinde conſpectioribus " diſcreto conſtat, quo unguentarii uti ad nonnulla conſueverunt: alterum ro- " tundius, ſqualenſque vehementer, ſicut σφακελᾳ (al ἐλελισφακᾳ) inciſuraſque " habens obſcuriores, minuſque ſerratum." *Theophr. l.* 6. *Hiſt.* c. 2. p. 550. " Marrubium (πρασιον) frutex eſt ab una radice ramoſus, ſub-hirſutus, candi- " cans, virgis quadrangularibus: folium pollicem æquat, ſubrotundum, vil- " loſum, rugoſum, guſtu amarum. Semen eſt in caulibus ex intervallis: flo- " res verticillato ambitu aſperi. Naſcitur circa domorum areas." *Dioſcorides*, l. 3. c. 119. p. 223. Hence our horehound is not improbably the πρασιον (not πρασσιον) and marrubium antiquorum.

" Marrubium dicitur forte a loco natali. Marrubii enim fuerunt populi " Italiæ, circa Fucinum lacum habitantes, a rege Marrubio denominati, vel " quod circa mare habitarent. Aliis vero marrubium vocatum propter ama- " ritudinem." *H. Ox.*. iii. 375. Marrubium dictum putatur, quod tabidis & " marceſcentibus conducat. . . . Vel quod folia marcida & ſqualentia ſint qua- " ſi rubigine exeſa. *J. Bod. a Stapel.*" *R. H.* 555. " Marrubium comes, as " it is ſaid, from the Hebrew word *Marrob*, which ſignifies a bitter juice." *Lem. Dict.* 340.

" Utuntur officinæ Græca potius appellatione. Hinc natus eſt commili- " tonibus Patavinis hic jocus. Stabam inter rhizotomas, quæ ex Euganeis ve- " num exponunt herbas, & admoto naribus marrubio albo: ei, inquam, mar- " rubium album? cui adſtans pharmacopœus in aurem, ei ſignore, praſio!" *Hoffman.* p. 330.

SECT. II.

It is a ſtimulating and deterſive deobſtruent, and diaphoretic; called pectoral, ſtomachic and uterine; and is commended in obſtructions of the viſcera, in the aſthma, jaundice, green-ſickneſs, &c. alſo for worms.

" Calfacit 2. ſiccat 3. aperit, abſtergit, attenuat, ſaporis amari. *Uſus Præcip.* " in obſtructionibus pulmonum, epatis, lienis, uteri, adeoque in phthiſi, in " expuitione ſanguinolenta, in partu difficili, lochiiſque remoratis. Extrin- " ſecus uſus ejus rarior eſt." *N. B.* " Veſicæ & renibus cenſetur noxium; " correctum tamen glycyrrhiza ac paſſulis nihil nocere dicitur. *Præp.* 1. Aqua " ſtillat. ex integra planta. 2. Syrupus de praſſio. 3. Species diapraſſi." *Schrod.* 621. Vide *Dioſcorid.*

1. It is of a ſubacrid and bitter taſte, and a ſtrong ſomewhat-aromatic ſmell. " Folia ſunt ſapore acri & amaro. Tota herba Dodonæo ſuavis & " grati eſt odoris, & nonnihil moſchum redolet, præſertim hybernis menſibus." *J. B.* " Odor totius plantæ vehemens, & nonnihil gravis." *R. H.* " The " leaves are very bitter, and of a penetrating ſcent: they do not redden the " blue paper. The natural ſalt of the earth (which is bitter, and compoſed " of ſea ſalt, ſal ammoniac and nitre) in this plant ſeems to be united with a " conſiderable quantity of ſulphur, phlegm and terreſtrial parts. By a chymi- " cal analyſis it gives much acid phlegm, much oil and earth, a little urinous " ſpirit, volatile ſalt, and fixed ſalt (peu lixiviel)." *T. Hiſt.* p. 115.—2. Summitatum & foliorum thea is of a very bitter taſte, with a flavour ſomewhat like that of camomile, (as indeed the ſcent is alſo). It redned a little a ſolution of turnſol; but a few drops ol. tartari added to the mixture made it blood red. Solutio vitrioli turned it to a dark ſea green, and ſoon and plentifully precipitated. After ſome weeks maceration, it turned putrid and abominably fetid. — 3. It is commended for coughs, conſumptions, ſcirrhous ſpleens, female obſtructions, hard labour, &c. but is ſaid to hurt the urinary paſſages. " Sed quomodo renibus eſt inimicum apud Dioſcoridem & Plinium? " Frequenti uſu exulcerat. Multo minus utendum in iis, in quibus jam ul- " ceratæ ſunt partes illæ." *Hoffman.* 331. If ſo, ſurely it is not proper in a hæmoptoe or empyema: yet it is much milder than helenium. That ever a ſcirrhus hepatis or lienis was cured by it, I very much doubt. Vide *R. H.* & *Geoff.* iii. 816. It may do ſervice in ſome jaundices. " ℞. ſyr. de praſio ℥ij. " ol. tartari p. d. ♑i. M. ſumat æger per intervalla frequentia cochl. 1. Me- " dicamentum eſt ad icterum nulli ſecundum." *R. H.* Soap is better.

" Analyſi chymica ex foliorum, a ſtipitibus mundatorum, & ſummitatum " floridarum ℔v. prodierunt humoris ℔iii. ℥xiii. ʒi. gr. xviii. ſalis vol. uri- " noſi gr. xx. olei ℥iij. gr. xii. carbonis ℥ix. ʒvii. gr. liv. unde cinerum ℥iv. " ʒv. gr. xxiv. ac inde ſalis fixi mere alcali ℥i. ʒiii. gr. xv. (ergo terræ ℥iij. " ʒij. gr. ix.) & jactura fuit ℥v. ʒvi. gr. xl." Secundum *Geoff.* iii. 815. Yet he owns chartam cæruleam non mutat: altho' by the analyſis all the humores, to the laſt ℥iij. were obſcurè acidi at firſt, then magis ac magis acidi.

" Marrubii albi ſuccus, vel infuſum ex vino, vel decoctum ex aqua a Fo- " reſto, Freitagio, Zacuto Luſitano, & Hartmanno, in hepatis obſtructioni-

" bus,

" bus, vel etiam ſcirrhoſis, in ictero, in hydrope icterum ſubſequente com-
" mendantur. *J. B.* Chomel obſervat duos ægrotantes a ſcirrho hepatis libe-
" ratos fuiſſe ab infuſo foliorum marrubii albi M. 1. in vini albi ℥viii. quo-
" tidie mane, per aliquot menſes, epoto. . . . Foreſtus aſſerit nonnullos ſtru-
" mis affectos diuturno uſu ſyrupi de praſſio ſimplici, ſeu ex ſucco recenti cum
" ſaccharo parati perſanatos fuiſſe, multis aliis remediis antea fruſtra tentatis." *Geoff.* iii. 816. 818.

SECT. III.

It may be given in powder to ʒi. or ʒij. in infuſion to ʒß. and the juice to ʒi. It is an ingredient in the theriaca Andromachi. No preparation of it is made here.

" Syrupus de praſio Meſuæ, egregie aſthmati antiquo ſervit, pleuritidi ſup-
" purato, &c. ſed valde calidus eſt. . . . Diapraſin Nicolai confuſio potius eſt
" quam compoſitio, cui ideo præfero Pauli compoſitionem ex l. 7. c. 11. in
" empyematicis & tabidis, quibus ſingulariter & mirifice utile eſſe ſcribit
" Dodonæus. Ab hac parum variat Tralliani l. 5. c. 4. ut et Aetii l. 8. c. 54.
" Non minus efficax eſt oxymel. *Gal.* 13. *Meth.* 18." *Hoffman.* 331.

MARUM.

SECT. I.

1. Marum, Marum vulgare. *Off.* Marum. *Lob.* 265. *Ger.* 670. *R. H.* 529. M. vulgare. *Park.* 12. *H. Ox.* ii. 372. M. vulgare, ſive Clinopodium. *Dod.* 271. Sampſuchus, ſive Marum maſtichen redolens. *B. P.* 224. Clinopodium quibuſdam, Maſtichma Gallorum. *J. B.* iii. 243. Maſtichma. *B. J.* 156. Tragoriganum. i. *Cluſ. H.* 355. Thymbra Hiſpanica majoranæ folio. *T.* 197. Thymus, verticillis lanuginoſis; dentibus calycinis ſetaceis, piloſis. *H. Cliff.* 306. Herb-maſtick, or maſtick-thyme, by ſome alſo called marum. *R. H.*

It grows in Spain in dry and ſtony places. In gardens it flowers in July. Froſt ſometimes kills it. The herb, rather the leaves and tops are uſed. " Fo-
" lia." *Ph. Lond.* 13. Some make marum a ſynonymum majoranæ. Vide *Hoffman.* p. 322. " Marum planta eſt exotica majoranæ in facultatibus &
" figura ſimilis, adeo ut pro una eademque herba a nonnullis habeatur.
" Quamobrem cum maro hiſce in regionibus deſtituamur majoranam, vel dic-
" tamnum creticum ſubſtituere ſolemus. *Præp.* Pilulæ marocoſtinæ Mindere-
" ri. Vide l. 2." (p. 268.) *Schrod.* 621. And this is all he ſays of it. It differs widely from both theſe plants. But that it is the maron antiquorum I cannot ſay; tho' it is uſed for it in magma hedychroi pro theriaca. " Ma-
" ron ſeu ὑσσωπιον, herba vulgo cognita, ſurculoſa, flore origani, attamen foliis
" multo candidioribus, ac flore odoratiore." *Dioſcorides* l. 3. c. 49. p. 193. So that this is rather the

2. Marum Syriacum. *Off.* Marum Cortuſi. *J. B.* iii. 242. *R. H.* 527. *H. Ox.* iii. 420. (quoad diſcr. at figura vitioſa). Tragoriganum alterum. *Lob.*

263. *Adv.* 211. Tragoriganum latifolium. *B. P.* 223. T. Lobelii. *Ger.* 668. T. latifolium, ſive marum Cortuſi Matthiolo. *Park.* 16. Chamædrys maritima, incana, fruteſcens, foliis lanceolatis. *T.* 205. Teucrium foliis ovatis, utrinque acutis, integerrimis, floribus ſolitariis, ſpicatim digeſtis. *H. Cliff.* 303. Goats-marjoram. *G. P.* Syrian herb-maſtick, or maſtick-thyme, vulgo marum ſyriacum. "Marum ſyriacum *Offic. Ger.* emac. 670. M. ſyriacum vel "creticum. *Park.* 13. *H. L.* 409. Marum creticum. *Alpin.* ex. 288. Ma-"jorana ſyriaca vel cretica. *B. P.* 224." *Dale.* p. 145. Sed hæc non ſunt ſynonyma hujus plantæ: & in ſynonymis hallucinantur. *H. Ox. B. J. Miller* Bot. *James Ph. Univerſalis.* (edit. 1747. in 8vo.) p. 367. errs in both his ſynonyma, copying Miller implicitly.

It grows in Spain. In our gardens it flowers in July, and can endure our common winters: but muſt be defended from cats, which are apt to deſtroy it, as ſoon as they find it. Some make it tragoriganum, or tragoriganum alterum Dioſcoridis. "Tragoriganum alterum gracilibus eſt ſurculis, exilioribuſque "foliis: quod etiam praſion aliqui vocavere." *Dioſcor.* l. 3. c. 35. p. 187. But as it is not the firſt evidently; ſo this deſcription of the other is too ſhort for a probable conjecture. Our plant agrees better to his deſcription of the marum, (if it could be ſaid to have flowers like origanum; ſo majorana bids fairer for being the marum Dioſc. than either of theſe two marums.) Hence it is the marum verum, marum Cortuſi. *Off. Geoff.* iii. 821. who ſays "Frequens "eſt in ſtæchadum *(yeres)* unâ quæ vocatur Pomponia, Gallis *Porte-croz.* "Hic in hortis colitur. Folia & ſummitates floridæ in uſum veniunt." The herb is uſed according to *Dale*, *Pharm*, *Edinb.* and *Lond. Vet.* Folia tantum, in the *New Pharm. Lond.* But the leaves, young ſhoots and flowers may be taken.

The common marum is of a ſubacrid, aromatic taſte, and fragrant, betwixt lavender and ſerpillum. "Folia ſapore acri prædita, odore grato, ſed "paulo vehementiore." *R. H.* The m. ſyriacum is acrid, pungent, and as bitter as wormwood; and has a pungent, yet pleaſant aromatic ſcent. "Sa-"pore amaro & acri, odore grato." *R. H.*

SECT. II.

1. Maſtick-thyme is a ſtimulating aromatic (ſicut lavendula), ſo an attenuating diaphoretic; called cephalic: and is commended in diſeaſes of the head and nerves; though uſed here only in trochiſci hedychroi.

2. The marum ſyriacum is vaſtly more acrid and pungent, yet agreeably aromatic, alſo ſubaſtringent: and ſo may be of ſignal uſe in cold phlegmatic indiſpoſitions; or wherever ſtrong bitters, or acrid aromatics are proper.

"Marum occurrit affectibus frigidis & humidis. Incidit, attenuat, aperit, "digerit, lentorem corrigit, & obſtructiones reſerat. Diureticum, carmina-"tivum, antiſcorbuticum eſt remedium. Inter remedia cephalica excellit. "Recipitur in theriacam cœleſtem." *Boecler. Cynoſ.* ii. p. 349. "Marum Cor-"tuſi. *J. B.* Virtutes eaſdem habet ac marum. Feles quoque & hac plan-"ta mire delectantur. Eſt ſapore amaro & acri, odore grato." *Boecler. Cyn.* iii. 230.

1. Marum tea is of an orange colour, almoſt aromatic, with the flavour of lavender: it reddens a little the ſol. heliotropii; and with ſolutio vitrioli becomes green, dark, and opake, precipitating ſoon and plentifully. But—2. Mari ſyriaci thea is very little tinctured, of a biting bitter taſte, with ſomewhat of the flavour of ſcurvy-graſs and wormwood, and pungent ſcent. With ſal vitrioli it turns of a dark bluiſh-green colour, opake, and precipitates more ſlowly and leſs than the former: in other things they agree. "Mari veri folia ſunt ſa-"pore, acri & amaro, odore vehementi & aromatico, grato, qui ſubito cerebrum "petit, & ſternutationes movet." *Geoff.* iii. 821. "This plant is very friend-"ly to nature; the leaves when rub'd emit an odour, which affects the brain "like volatile ſalt, but in ſummer, when ſcorched, and as it were burnt by "the heat of the ſun, yields no ſmell at all, tho' rubbed never ſo vehemently. "(I found it here always as odoriferous in ſummer as in winter; and do not "ſee whence he draws what follows). Hence it appears to contain an acidu-"lous volatile ſalt, and that nothing in art or nature affords the like." *James Diſp.* p. 367. See *Boerh. Hiſt. Plant.* p. 262. — 3. "Analyſi chymica "ex foliorum & ſummit: floridarum ℥xxxv. prodierunt humoris ℥xxvi ʒi. olei "ʒiß. carbonis ʒiv. unde cinerum ʒix. gr. xii. ac inde ſalis fixi alcali ʒiij. gr. "xxiv. (ergo terræ ʒv. gr. lx.) & jactura fuit ʒiij. ʒiij." (ſum. ℥xxxv.) Secundum *Geoff.* iii. 821. Who gives it (viz. marum verum) a ſal eſſentialis tartareus, and alſo a ſal volatilis, tum acidus tum urinoſus, multo oleo conjunctus; ſays it reddens the blue paper; and is too much commended by Widelius. "Eædem vires ipſi quæ M. Cort. tribuuntur: ſed rarioris eſt uſus." *Geoff.* iii. 824.

MATRICARIA.

SECT. I.

Matricaria, Parthenium. *Off.* Matricaria, vulgaris, ſeu ſativa. *B. P.* 133. *T.* 493. Matricaria. *Dod.* 35. *Ger.* 652. *R. H.* 357. *Syn.* 187. M. *vulgo* minus Parthenium. *J. B.* iii. 129. M. vulgaris, ſimplex. *Park.* 83. M. vulgaris. *C. B. P. H. Ox.* iii. 52. Matricaria, foliis compoſitis, planis; foliolis ovatis inciſis; pedunculis ramoſis. *H. Cliff.* 416. Common feverfew.

It grows by hedges, in rubbiſhy places, &c. in England &c. flowering in June and July. The herb, or leaves and flowering tops are uſed. "*Officin.* Her-"ba cum floribus." *Schrod.* 622. "Herba, flores." *Ph. Edinb.* "Folia." *Ph. Lond.* Is it the Parthenium Dioſcoridis?

"Parthenium aliqui amaracon, alii leucanthemon vocant; foliis eſt cori-"andri, tenuibus, floribus per ambitum albis, in medio vero melinis, odore "ſubviroſo, & ſapore ſubamaro." *Dioſcor.* l. 3. c. 155. p. 236. "Parthenium, alii leucanthen, alii tamnacum vocant. . . . Naſcitur in hortorum ſe-"pibus, flore albo, odore malo, ſapore amaro." *Plin.* l. 21. c. 30. p. 565. Both make it purgative. Vide *Hoffman.* p. 331. "Παρθενιον, quaſi virginalis, "quod morbis mulierum uterinis medeatur, (hinc vulgo matricaria) *Dioſcor.* "l. 3. c. 155. cui & ἀμαραχον, ut & Galeno & Aeginetæ. Plinius & arte-"miſiæ. l. 25. c. 6. & mercuriali. l. 25. c. 5. & huic l. 21. c. 30. Parthe-"nii nomen tribuit." *B. P.*

SECT.

SECT. II.

It is a ſtimulating and deterſive or ſaponaceous deobſtruent and diuretic; called uterine; and commended internally in female obſtructions, retention of the ſecundines, in hyſteric fits, flatulent and nephritic colics, agues, worms, dropſy, &c. and outwardly as emollient and anodyne. It is ſomewhat more acrid than camomile, tho' more viſcid.

" Calfacit 3. ſiccat 2. attenuat. *Uſus præcip.* in affectibus uteri frigidis ac " flatulentis, in obſtructionibus menſium, in impotentia veneris, in hydrope " (purgat per urinam, nonnunquam & per alvum) &c. in febribus putridis, " in calculo renum, in vertigine. Extrinſecus in ſuffocatione matricis, (de- " coctum cum aceto naribus applicatum), in menſibus ciendis, (peſſar.) in " duritie mammarum, (catapl.) in æſtu febrili mitigando, fricando dorſum) in " arthritico dolore ſedando, &c. *Præpar.* 1. Aqua ſtillatitia, ex integra herba. " 2. Sal communis, ex cinere. 3. Syrupus de matricaria. 4. Oleum ſtilla- " titium: raro exſtat." *Schrod.* 622. Antacidis, acribus aromaticis, & uterinis, adnumeratur in *Boerh. lib. de M. M.*

1. It is of a very bitter and nauſeous taſte, and ſtrong heavy ſmell. " Fo- " lia odore gravi, ſapore amaro." *J. B.* " The ſcent is ſtrong and ſtuffing, " and taſte very bitter." *Park.* " Odoris eſt fortis aromatici, accedentis ad " tanacetum; ſaporis valde amari & calidi." *Nucl. Belg.* 189. — 2. Herbæ thea is not altogether ſo much tinctured as that of chamomile: but more viſcid and ſubturbid, and of a very bitter and more nauſeous taſte: otherwiſe it agrees with chamomile tea. — 3. It is avoided by bees and flies. Vide *R. H.* 357. So is probably a vermifuge. " Ventris tænias expellit, vel herba ipſa, " vel ſuccus expreſſus, non ſecus ac centaurium aut abſinthium." — 4. Externally it is commended for hard tumors, (ſc. mammarum, &c.) for the gout, for pains of the head. (Vide *R. H.*) Applied to the wriſts with ſalt, it is ſaid to ſtop an ague. — 5. " Analyſi chymica ex foliorum & ſummitatum recenti- " um matricariæ ℔v. prodierunt humoris ℔iv. ℥vii. ʒiß. ſalis vol. urinoſi " ʒi. gr. xlii. olei ℥j. ʒvi. gr. lx. carbonis ℥iv. ʒvi. gr. xxiv. unde cinerum ℥ij. " ʒiij. ac inde ſalis fixi alcali ʒix. gr. xlv. (ergo terræ ʒix. gr. xxvii.) & jactura " fuit ℥ij. gr. xii." Secundum *Geoff.* iii. 825.

" Succus foliorum colorem ſubrubrum chartæ cæruleæ affert. Salem eſ- " ſentialem obtinet hæc planta ammoniacalem, cum multo oleo, tum tenui " eſſentiali, tum craſſo fœtente conſociatum. Inter plantas hyſtericas inſig- " nem locum occupat. . . . Mihi, inquit Simon Paulli, frequenti in uſu eſt, " ſi lochia poſt partum negotium faceſſant mulierculis. Parare enim ex ea " & floribus chamomillæ cum tantillo artemiſiæ decoctum conſuevi, a cujus " uſu hyſterica ſymptomata illico ceſſare, & lochia abunde fluere ſæpe com- " peri. Quod medicamentum licet non jucundum aliis, hyſtericis tamen cor- " reptis paſſionibus, veluti ſeſamo ac papavere ſparſum apparet; quæ ab il- " lius uſu ex lethargo excitatæ, in vitam, Deo benedicente, veluti redire con- " ſpici ſolent. . . . Externe præſcribitur in fomentis cum chamomilla decoc- " ta, in uteri inflatione & doloribus poſt partum, lochiorum remora, menſi- " umque fluxu doloroſo quarundam mulierum." *Ibid.* p. 826. It is commend-

ed

ed alſo in the gout, vertigo, in impotentia, &c. " The juice to the quan-
" tity of ʒij. given an hour before the fit, is good for all kinds of agues."
Miller Bot. 288. Vide *Sim. Paulli Q. B.* p. 390.

SECT. III.

It may be given in powder to ʒi, in infuſion or decoction to ʒß, the juice to ʒij. It is an ingredient in the aqua bryoniæ compoſita.

" Ad uterinos affectus plurimum conducit, vel pulverata a ϑß. ad ϑij. vel
" ejus ſuccus expreſſus & defæcatus, ad ʒi. vel alteram. Sicut infuſum aut
" decoctum ad ʒvi." *Geoff.* iii. 826. " Iis qui purgare nolunt, oppono ſa-
" pientes mulieres Tragi (i. *Hiſt.* 50.) quin ſapientiſſimum medicum Braſavo-
" lam, in exam. ſimpl. qui doſim ſtatuit ſucci ʒiv. Sed quid purgat? Pituitam
" & atram bilem. Experientiæ addo rationem validam. Quæ tam potenter
" deobſtruunt, in juſta doſi ſimul purgant." *Hoffman.* 332.

MELILOTUS.

SECT. I.

Melilotus. *Offic.* Melilotus officinarum Germaniæ. *B. P.* 331. *T.* 407. Melilotus Germanica. *Lob.* 501. *Ger.* 1215. M. vulgaris. *Park.* 718. *R. H.* 951. *Syn.* 331. Trifolium odoratum, ſive melilotus. *Dod.* 567. T. odoratum, ſive melilotus, vulgaris, flore luteo. *J. B.* ii. 370. T. odoratum, ſeu melilotus, fruticoſa, lutea, vulgaris; vel officinarum. *H. Ox.* ii. 161. Trifolium, floribus racemoſis; leguminibus nudis, diſpermis; caule erecto. *H. Cliff.* 376. Common melilot.

It grows in hedges, among corn, &c. in England, flowering in June and July, the ſecond year. The herb (rather leaves) and flowers are uſed. " Flo-
" res, ſeu integra herba, ſemen." *Schrod.* 622. What the μελιλωτος *Dioſcoridis* l. 3. c. 48. p. 192. and meliloton *Plinii* l. 21. c. 9. p. 648. was, I know not; but ſurely not this plant, which by no means is croco ſimilis.

SECT. II.

It is diluent, emollient and diuretic; called pectoral and anodyne; and commended in coughs, colics, nephritic pains, &c. but uſed almoſt only externally, for pains, inflammations and tumors, in cataplaſm, fomentation, plaiſter, and clyſter. The doſe is ad libitum. It gives name to a plaiſter.

" Calfacit 1. emollit, diſcutit, dolores mitigat. Uſus creberrimi præcipue
" extrinſecus, in doloribus, tumoribus, oculis rubicundis, in clyſteribus, &c.
" *N. B.* Quoties ſimpliciter meliloti fit mentio, ſemen recipiendum. *Præpar.*
" 1. Aqua ſtillat. ex herba cum flore. 2. Emplaſtrum de meliloto." *Schrod.* 622. Aquoſis ſubfarinoſis emollientibus, & ſtimulantibus aromaticis accenſetur in *Boerh. lib. de M. M.*

1. It is of an herbaceous, fat, bitterish and somewhat unpleasant taste, and soft honey-smell; when dried it is most fragrant. "Flores odore suavi mel-"lito." *J. B.* "Semina sapore leguminoso. . . . Nullum fere odorem vi-"rens habet, sed cum aruerit fragrantissimum." Vide *R. H.* "Odoris le-"niter aromatici, accedentis ad fænum-græcum, saporis herbaceo-legumino-"si." *Nucl. Belg.* 190. "This plant reddens very little the blue paper: it is "acrid, bitter, styptic, odoriferous, and causes slight nauseæ when well "chewed: which makes it probable that its salt resembles much the natural "salt of the earth, united to much essential oil, and terrestrial parts: for by a "chymical analysis, melilot, besides a great deal of acid phlegm, gives also "much oil and earth, a considerable quantity of urinous spirit and volatile salt, "and of fixed alcali salt. Hence it is aperient, resolutive and anodyne." *T. Hist.* p. 117. — 2. Herbæ thea is of a straw colour, leguminous taste, and little smell: it reddens a little the solutio heliotropii; and turns of a dark browniſh colour, but pellucid, on the affusion sol. vitrioli, precipitating little and slowly. In 7 days it began to ferment: and in 2 or 3 weeks was as viscid as whites of eggs. — 3. The aqua florum stillatitia is not very odoriferous; but Cæsalpinus observes, that mixed with other aromatics it increases their perfume, and makes it more durable. Vide *J. B.* ii. 271. *T. Hist.* p. 118. "Aqua flo-"rum meliloti odorata servatur in officinis, sed rarioris est usus. Ad odora-"menta sæpius usurpatur: cæterorum odoramentorum fragrantiam, tenuitate "sua evehit & expandit." *Geoff.* iii. 836. — 4. It feeds cattle. Hence in Italy it is called *Trifoglio cavallino*; "quod ejus pabulo maxime delectantur equi." *Matth.* p. 809. "Apud nos etiam in Anglia subinde seritur, pro equorum "& jumentorum pabulo." *R. H.* 951. — 5. It is much commended outwardly, as emollient, discutient and anodyne; and inwardly also by some, in inflammations of the guts, obstructions of urine, rheumatism, (*T. Hist.* l. c.) Fluor albus, (*Geoff.* iii. 835.) tympanitis, (*Nucl. Belg.* l. c.) &c. But little used thus. "Interne inter expectorantia recensentur flores; potior tamen eo-"rum usus est externus; discutiunt, emolliunt, dolores mitigant: hinc in in-"flammationibus quibusvis, præcipue uteri, ani, testium, ut & in doloribus "nephriticis & podagræ conveniunt." *Herman. Cyn.* p. 596. *Boeclerus* adds, "Adhibetur melilotus in clysteribus & decoctis ad hydropem, pleuritidem, "stranguriam, obstructionem mensium, ut & venena. Prodest quoque in flu-"ore albo. Decoctum meliloti laudatur insigniter ad dolores post partum, at-"que etiam ante partum, mitigandos." *Ibid.* p. 597. It is certainly a mild and safe plant. Anne cum galega convenit?

"Analysi chymica, ex meliloti floridi, demptis radicibus, ℔v. prodierunt "humoris ℔iv. ℥iv. ʒv. salis vol. urinosi ʒß. olei ʒi. ʒvii. gr. liv. carbonis ℥v. "ʒij. unde cinerum ℥i. ʒvi, gr. lx. ac inde salis fixi alcali ʒij. gr. xlv. (ergo "terræ ʒxii. gr. xv.) & jactura fuit ℥iv. gr. xviii." Secundum *Geoff.* iii. 834. who gives it a sal essentialis tartareo-vitriolicum ammoniacalem.

"Paratur in officinis emplastrum de meliloto Mesuæ; quod quidem pitui-"tam viscidam egregie discutit, resolvit, & dolores apprime sedat; tumores "emollit, & nonnunquam maturat." *Geoff.* iii. 836. And thus ends his third and last volume. The emplastrum de meliloto Mesue, (*Pharm. Aug. Zwelf.* p. 381.) is a perplexed composition: *ours* is simple enough, consisting of melilot, tallow, wax and resine, only, and as good as Mesue's, tho' it has 20 more in-

gre-

gredients than ours. The *New London Dispensatory* has thrown out the melilot also, not allowing it so much as a place in the M. M. and call the plaister, emplastrum attrahens, (vide *Narrative of the Committee*, p. 122.) which is substituted in place of the melilot plaister, and consists of cera, and resina flavæ p. iii. and sevi ovilli p. i. only. Is it preferable to the melilot plaister? — Our "empl. cereum is ℞. ceræ flavæ ℔iv. resinæ albæ, sevi ovilli āā. ℔ij. liquef- "cant in emplastrum. Quod vicem supplet empl. e meliloto." Thus *Ph. Edinb.* (an. 1756.) slavishly imitate!

MELISSA.

SECT. I.

Melissa. Melissophyllum, Apiastrum. *Officin.* Melissa hortensis. *B. P.* 229. *T.* 193. Melissa. *Dod.* 91. M. vulgaris, odore citri. *J. B.* iii. 232. *H. Ox.* iii. 408. Melissa. *Ger.* 689. *R. H.* 570. M. vulgaris. *Park.* 40. Apiastrum, sive Melissophylon. *Lob.* 277. Melissa, floribus ex alis inferioribus ferme sessilibus. *H. Cliff.* 307. Common (or garden) baulm, or bawm.

It grows naturally in Italy. In gardens it flowers in July. "Circa Gene- "vam vidit spontaneam in sepibus J. Bauhinus. Floret Junio, Julio & Au- "gusto," *R. H.* The herb is used: "Folia." *Pharm. Lond.* 13. "Herba, "& flores." *Dale* 155. "Pro officinis colligenda est tempore verno, & ex- "tra florem, ad quem ubi pervenit, jam cimices olet". *Hoffman.* p. 334. I have not observed this fetor, but it smells sweeter, before than after it flowers.

"Apiastrum (μελισσοφυλλον) quod aliqui μελλιτταιναν vocant, quoniam "apes ea herba delectantur, foliis & cauliculis ballotæ similis est, attamen "majoribus & tenuioribus, neque ita hirsutis, citreum vero malum redolen- "tibus." *Dioscor.* l. 3. c. 118. p. 222. "Melissophyllo sive melittidi si pe- "rungantur alvearia, non fugiunt apes. Nullo enim magis gaudent flore." *Plin.* l. 21. c. 20. p. 561. "Apiastrum Hyginus quidem melissophylon apel- "lat; sed in confessa damnatione est venenatum in Sardinia." *Plin.* l. 20. c. 11. p. 522. Here he confounds it with another plant; "Melissophyllon "quod apiastrum vocamus." *Plin.* l. 21. c. 9. p. 648—100. *Virgil* calls it Melisphylla:

— — — — — "Jussos adsperge sapores,
"Trita melisphylla, & corinthæ ignobile gramen."
Georg. iv. *v.* 62.

SECT. II.

It agreeably stimulates; is said to comfort and chear the spirits; is called cordial, cephalic and uterine; and is commended for lowness of spirits, palpitation of the heart, fainting, loss of memory, vertigo, apoplexy, palsy, epilepsy, mania, barrenness, female obstructions, &c.

" Calfacit 2. ſiccat 1. uſus magni eſt in affectibus cephalicis, cardiacis, ute-
" rinis; hinc et in ſtomachicis, adeoque in melancholia, ſomnis turbulentis,
" paralyſi; apoplexia, epilepſia, vertigine, lipothymia, cruditate ventriculi, re-
" moratis menſibus & lochiis puerperarum, ſuffocatione uteri: emendat inſu-
" per fœtorem anhelitus. Extrinſecus in uterinis balneis, cataplaſmatis, in
" ictibus venenatis, apum, veſparum. *Præpar.* 1. Aqua ſtillat. ex herba in-
" tegra. 2. Oleum, ex herba ſicca: raro extat. 3. Extractum, ex foliis.
" 4. Conſerva, ex floribus. 5. Syrupus ſimplex, ex ſucco. 6. Syrupus com-
" poſ. Fernelii." *Schrod.* 622. Eſt ex aribus aromaticis, ſcorbuticis lenioribus, & roborantibus, in rachitide propriis. *Boerh. lib. de M. M.*

1. It is of a ſoft, and ſomewhat aromatic taſte, and fragrant lemon-ſmell; which is leſſened by bruiſing, and quite loſt in drying. " Folia odore citri,
" ſapore acrimonia aliqua linguam feriente." *J. B.* " Odoris eſt grati fere ad
" inſtar citri; ſaporis ſubacris & calidi." *Nucl. Belg.* 191. The diſtilled water is but weak nevertheleſs, and it yields little eſſential oil. But — 2. It is perhaps too much commended. " Dixerat Paracelſus, ſibi experimentis ſci-
" tum, in meliſſa hoſpitari virtutem prorſus propriam, ſpecificatim dicebat,
" quæ inſinuans ſe humoribus corporis humani, inſtauraret iis jam ſenilibus
" novum juventæ vigorem, hacque ratione podagram extirpare radicitus. Pa-
" ria bonus *Iſaacus Hollandus* promiſerat. Si vera ſunt virorum dicta, credi-
" derim me hac arte exhibiturum compendio unitas vires fortiſſimas, hujus
" herbæ in hac aqua, cujus in meipſo pulcherrimos effectus deprehendi, jejuno
" ventriculo potæ. Sane in melancholicis, hypochondriacis, hyſtericis, chlo-
" roſi laborantibus, palpitationi cordis obnoxiis, quoties mala hæc a ſpirituum
" perturbatione magis, quam a materiæ morbificæ mole aggeſta pendent, vix
" par remedium reperies, quamvis pretioſum ſit ſatis." *Boer. Chem.* ii. *Proceſ.* 16. Alſo in acuendo ingenio, for hard labour, retentis ſecundinis, (*R. H.*) flatulencies, dimneſs of ſight, &c. " Febure primum ens meliſſæ mire præ-
" dicat, quo aniculam juventuti reſtituiſſe affirmat." Vide ejus *Chym. part.* 2. p. m. 221. &c. & *Herman.* p. 457. *Credat qui vult.*

SECT. III.

It may be uſed any way ad libitum. The aqua ſtillatitia is the only preparation in uſe here. It is one of the ingredients of the aqua alexiteria, aqua mirabilis, aqua meliſſæ, troch. cardialgici. But elſewhere conſerves, ſyrups, compound ſpirits are prepared with it. Some uſe it by way of tea. The aqua meliſſæ compoſita is a famous drachm in many parts. Vide *James Pharm.* p. 643.

MENTHA.

SECT. I.

1. Mentha. Mentha ſativa, Mentha ſpicata. *Offic.* Mentha vulgaris. *Ph. Lond.* Mentha anguſtifolia, ſpicata. *B. P.* 227. *R. H.* 532. M. ſpicata, folio longiore, acuto, glabro, nigriori. *J. B.* iii. 220. M. romana, præſtantior,

anguſtifolia. (*Lob.* 271?) *H. Ox.* iii. 367. Our common garden-mint, or ſpear-mint.

But mentha ſpicata, folio longiore, acuto, glabro, nigriori *J. B.* is the mentha ſylveſtris, longioribus, nigrioribus, & minus incanis foliis, *B. P.* 227. according to *T.* 189. and *Vail. Bot. Par.* 125: And mentha, anguſtifolia ſpicata, glabra, folio rugoſiore, odore graviore, *R. Syn.* 233. according to *Dillenius.* In a word, in thy ſynonyma menthæ anguſtifoliæ, ſpicatæ, *B. P.* The greateſt Botaniſts, Ray, Moriſon, Sutherland, B. J. Dale, Vaillant, yea Linnæus, ſeem all to err, and alſo to differ amongſt themſelves, tho' this is the ſynonymum given in the *London Diſpenſatory*; which, if it be the plant there deſigned, is the mentha tertia *Dod.* 95. and has "folia oblonga ad ſalicis formam accedentia, ſed candi- "diora molliora, & hirſutiora." *Dod.* But if the mentha anguſtifolia ſpicata, *B. P.* in *R. H.* and *H. Ox.* it has, "Folia oblonga, acuta, atro-virentia, mini- "mum hirſuta, per ambitum ſerrata; & florum puſillorum exalbidorum, punc- "tulis rubentibus guttatorum verticilli longiuſcula ſerie, ſpicam effigiant." *J. B. R. H. H. Ox.* which are evidently different ſpecies.

2. Mentha aquatica, Siſymbrium. *Officin.* Mentha rotundifolia, paluſtris, ſeu aquatica major. *B. P.* 227. *T.* 189. *H. Ox.* iii. 370. M. aquatica ſive Siſymbrium. *J. B.* iii. 223. *R. H.* 533. *Syn.* 233. *Ger.* 684. M. aquatica rubra. *Park.* 1243. Siſymbrium. *Dod.* 97. Mentha floribus capitatis, foliis ovatis, ſerratis, petiolatis. *H. Cliff.* 306. Water-mint.

3. Mentaſtrum, Mentha caballina. *Officin.* Mentha ſylveſtris, longiore folio. *B. P.* 227. *T.* 189. *H. Ox.* iii. 367. Menthaſtrum. *Dod.* 96. Mentaſtrum. *Ger.* 684. Menthaſtrum ſpicatum, folio longiore candicante. *J. B.* iii. 221. *R. H.* 532. *Syn.* 234. Mentha, ſpicis confertis, foliis ſerratis, ſeſſilibus. *H. Cliff.* 306. Horſe-mint.

N. B. "Vix ſpecie ab antecedente (viz. M. ſpicis ſolitariis, interruptis; fo- "liis lanceolatis, ſerratis ſeſſilibus. *H. Cl.* ſeu M. anguſtifolia ſpicata. *B. P.* & "M. tertia. *Dod.*) differe videtur." *Lin. H. Cliff.* 306.

4. Pulegium, Pulegium vulgare, Pulegium latifolium. *Off.* Pulegium latifolium. *B P.* 222. Pulegium. *Dod.* 282. *J. B.* iii. 256. *R. H.* 533. *Syn.* 235. P. regium. *Ger.* 671. *H. Ox.* iii. 371. Mentha aquatica, ſeu Pulegium vulgare. *T.* 189. Mentha, floribus verticillatis, foliis ovatis, obtuſis, vix crenatis. *H. Cliff.* 307. Pennyroyal, or Pudding-graſs.

5. Pulegium cervinum, P. anguſtifolium. *Offic.* Pulegium anguſtifolium. *B. P.* 222. *Ger.* 672. *R. H.* 534. *H. Ox.* iii. 371. P. cervinum, anguſtifolium. *J. B.* iii. 257. P. anguſtifolium, ſive cervinum. *Park.* 30. Mentha, aquatica, ſatureiæ folio. *T.* 190. Mentha, floribus verticillatis, foliis linearibus. *H. Cliff.* 307. Hart pennyroyal, or French pennyroyal.

6. Mentha piperitis. *Ph. Lond.* 13. Mentha, ſpicis brevioribus & habetioribus; foliis menthæ fuſcæ; ſapore fervido piperis. *R. Syn.* (ed. 2. p. 124. 3.) 234. Mentha paluſtris, ſpicis brevioribus & habetioribus; foliis oblongis, ſapore piperis. *R. H.* iii. 284. M. ſaxifraga, anguſtiore folio, ſpicata, ſapore acri, fervido. *Pluken. Mant.* 129. Mentha piperis ſapore. *Offic. Dale.* 146. Pepper-mint "found by Dr. Eales in Hertfordſhire, and communicated to us: ſince by Mr. Dale in Eſſex." *R. Syn.* l. c.

7. Mentha cataria, Nepeta. *Off.* Mentha cataria, vulgaris & major. *B. P.* 228. M. cataria. *J. B.* iii. 225. *R. H.* 548. M. felina, ſive cataria. *Ger.* 682.

Cataria

Cataria herba. *Dod.* 99. Cataria major, vulgaris. *T.* 202. Nepeta major vulgaris. *Park.* 38. *R. Syn.* 237. N. ſive mentha cataria, vulgaris & major. *H. Ox.* iii. 414. Nepeta, floribus interrupte ſpicatis, pedunculatis. *H. Cliff.* 310. Nep, or Cat-mint.

Theſe are all natives of Britain, except the 5th: all ſpecies, or varieties of the mentha, except the 7th. They all flower in July, but the 7th, which flowers in Auguſt. There are no leſs than 16 ſpecies and varieties of this genus in Britain, which are indigenous according to *R.* (*Syn.*) In *T.* (*Inſt.*) there are 24. In *H. Cliff.* 8 ſpecies, and 4 varieties. All agree much in their virtues. "Mentha "aquatica eaſdem cum ſativa vires habet, adeoque in ejus defectu, ſubſtitui "poterit." *Schrod.* 624. His mentha ſativa is either the M. rotundifolia, criſpa, ſpicata. *B. P.* Or M. anguſtifolia ſpicata. *B. P.* *Dale* makes a dozen of them *Officinales:* but the *London Diſpenſatory* only three, viz. the 1ſt, 4th, and 6th. And perhaps the moſt valuable of them all is none of the ſeven.

"Mentæ nomen ſuavitas odoris apud Græcos mutavit, cum alioqui mintha "vocaretur: unde noſtri nomen declinaverunt. Grato menta menſas odore percurrit in ruſticis dapibus." *Plin.* l. 19. c. 8. p. 505. l. 28. In Hippocrates we meet with μινθη frequently; but I have obſerved ἡδυοσμος, the other name Pliny points at, in the ſuſpected books only; from ἡδυς, ſuavis, and ὀσμος, odor. "Hidyoſmi *Theoph.* 7. *Hiſt.* 7. (p. 810.) at mentæ μινθην, habet 6. *Hiſt.* 7. (p. 678.) meminit." *B. P.* It is not deſcribed by Dioſcorides, tho' he compares the leaves of ſeveral other plants to it, as ſiſymbrium, hydropiper, pentaphyllum: neither by Theophraſtus, tho' he gives ſome characters of it. Vide *Bod.* in *Theophraſt.* p. 813. "Mentaſtrum ſylveſtris menta eſt," ſays *Pliny* l. 20. c. 14. p. 525. which chapter is de mentaſtro, menta, pulegio, nepeta & cumino.

"Menta (ἡδυοσμος) aliis mintha (μινθη) cognita herbula eſt. Vim habens "calfacientem, ſtypticam exſiccantem: &c." *Dioſcor.* l. 3. c. 41. p. 189. "Sylveſtris ἡδυοσμος hirſutioribus eſt foliis, & prorſus major ſiſymbrio, at "odore magis viroſo: quare minus ad ſanorum uſus idonea eſt." *Dioſcor.* l. 3. c. 42. p. 190. "Pulegium (γληχων) herba vulgaris notitiæ. Extenu- "at, &c. *Ibid.* c. 36. p. 187. "Siſymbrion (alii ſerpyllum ſylveſtre vocant) "in ſolo inculto naſcitur mintæ hortenſis ſimilitudine, ſed latioribus foliis, "atque odoratius, (ἐυωδεστερον): quod quidem coronis inſeritur. Calfaciendi "vim habet; &c." *Dioſcor.* l. 2. c. 155. p. 141. Canit *Ovidius Metamor.* l. 10. v. 728.

— — — — "An tibi quondam
"Fœmineos artus in olentes vertere menthas,
"Perſephone, licuit?"

SECT. II.

They are all ſtimulating aromatics, agreeing much with calamint in virtues. The firſt is called ſtomachic, cephalic and carminative; and is commended internally in cold, phlegmatic and flatulent indiſpoſitions of the ſtomach and guts, in hiccups, vomitings, heartburns, colics, choleras, vertigoes,

goes, female obſtructions, &c. and externally, as diſcutient and antiſeptic, for inflammations, œdematous tumors, gangrenes, &c. The 4th is reckoned more uterine, and ſucceſsful in menſibus & lochiis pellendis; and is alſo good for coughs, aſthmas, &c. The 6th is eſteemed greatly of late for the colic; and as a ſpecific for the ſtone in the kidneys and gall-bladder. The reſt are little uſed, and that almoſt only externally in uterine and nervine baths and fomentations.

" Menthæ ſativæ herba cum floribus, calfacit & ſiccat in principio 3. par-
" tium eſt tenuium, ſubaſtringit. *Uſus præcip.* in ventriculi imbecillitate, cru-
" ditate, ſingultu, vomitu, flatu, ardore, epatis obſtructione, inteſtinorum do-
" lore, capitis vertigine; lactis coagulationem impedit. Extrinſecus corrigit
" ventriculi imbecillitatem doloreſque colicos ſopit (cataplaſm:) duritiem
" mammarum, lactiſque coagulationem, capitiſque achores ſanat, &c. N.
" mentha aquatica, eaſdem cum ſativa vires habet. *Præp.* 1. Aqua ſtillat.
" ex herba. 2. Syrupus, de mentha, minor. 3. Syr. de M. major. 4.
" Conſerva, ex foliis. 5. Oleum ſtillat. 6. Oleum infuſum, ex mentha criſ-
" pa. 7. Balſamus. Rarus eſt. 8. Sal ex cinere." *Schrod.* p. 624. It ſtands among the acria aromatica, & ſcorbutica leniora, in *Boerh. Lib. de M. M.*

" Pulegium calfacit & ſiccat 3. ſaporis ſubacris & ſubamari, partium te-
" nuium, attenuat, incidit, aperit, reſolvit. *Uſus præcip.* in menſibus ciendis,
" fluore albo, fœtu ejiciendo; confert epaticis, ac pulmonaicis; nauſeam ac tor-
" mina ventris diſcutit; calculum ac urinam pellit; ictero ac hydropi medetur.
" Extrinſecus prodeſt capiti, ſomnum arcet, vertiginem diſcutit, doloribus
" arthriticis convenit, dentes abſtergit, pruritum cutis curat, &c. *Præp.* 1.
" Conſerva ſummit. 2. Aqua ſtill. ex herba. 3. Aqua bis deſtillata. 4. O-
" leum ſtillatitium." *Schrod.* 657.

" Nepeta calfacit & ſiccat 3. partium eſt tenuium, attenuat, aperit. *Uſus*
" *præcip.* in morbis uterinis, *ſcil.* obſtructionibus, ſterilitate, fœtu pellen-
" do; tum quoque in tartaro pulmonum incidendo, &c. Extrinſecus in
" balneis pro utero. N. ob gravem odorem raro intrinſecus exhibetur."
Schrod. 634.

1. The common mint is of a warm, acrid, aromatic and diſagreeable taſte, ſcarcely bitter; and ſtrong fragrant ſmell. " The leaves of water-mint are
" acrid, bitter, aromatic, and make but little impreſſion on the blue paper.
" There is in it a ſal. vol. oleoſum very aromatic. It is very ſtomachic and
" diuretic." *T. Hiſt.* p. 213. " Menthæ dantur plures. . . . Odoris fortis,
" grati, aromatici, ſaporis amaricantis, acris, calidi, & ſubauſteri. Fere
" omnes odore conveniunt." *Nucl. Belg.* 193.—2. Summitatum thea is of the colour of brandy not too old; and of the aromatic diſagreeable taſte, and ſmell of the herb, or diſtilled water, not bitter. It only dilutes ſyrup of violets and ſolution of turnſole: but ſolutio vitrioli makes it green and ſubturbid at firſt, then bluiſh and more opake, and precipitates ſlowly and ſparingly. Ol. tartari turns it yellow, turbid, and lets fall a whitiſh mucus, but not fetid. Hence it is ſubaſtringent only &c.—3. It is ſaid to hinder the curdling of milk.
" Coire lac denſarique in caſeum non patitur, ſi illi (menthæ ſativæ) immer-
" gantur folia." *Dioſc.* l. 3. c. 41. p. 189. " Menthæ folia lacti immerſa
" coagulari, & illud in caſeum coire non permittunt. *Trag.* Quin & ven-
" triculo lac coagulari non patitur." *R. H. Is this fact?* It abounds with eſ-

 ſential

ſential oil. And — 4. Is commended and uſed in many diſeaſes. As the 2d 3d, 4th, 5th, and 6th, agree in character; ſo alſo, much in taſte, ſmell and virtue: Only

Pennyroyal is reckoned more acrid, and efficacious than mint. "It warms "and comforts the bowels. . . . the juice, or a ſtrong decoction of the lea-"ves, ſweetned with ſugar, has been accounted a ſpecific againſt an hooping "cough." *Miller Bot.* 363. "Succus pulegii cochl. i. menſura, pueris ex-"hibitus, efficaciſſimum eſt remedium ad tuſſim illam clamoſam, ſeu convul-"ſivam, noſtratibus *the chin-cough* dictam, aliis catarrhum ferinum, quæ te-"neram ætatem plurimum infeſtare ſolet. Hujus notitiam D. Boyle accep-"tam refero &c. *R. H.* 534.

The taſte of the pepper-mint is ſingular; to me it is very hot, penetrating, aromatic and diffuſive, ſmelling like the water-mint, which habitu & loco natali it moſt reſembles; only the leaves are liker to the baſil-mint leaves: yet it ſoon, as it were, cools the tongue: and an acquaintance of mine, of a good taſte, informs me it is rather cold than hot in his mouth. "Tota plan-"ta ſapore eſt acri & fervido piperis." *R. Syn.* 235. "Pepper-mint is eſteem-"ed by ſome to be an excellent remedy againſt the ſtone and gravel, which "ſeems to be very probable; for beſides its hot, biting taſte, it has a nitrous "one, very diſcernible." *Miller Bot.* 293. "The diſtilled water is by ſome "called colic-water." *James Diſp.* p. 371. "It is a very faſhionable water, "and may be uſed properly as a carminative, in caſe of flatulencies in the "ſtomach, or whenever this organ is intended to be warmed, being very hot "and pungent. But I don't believe it capable of curing any diſtemper, tho' "it may relieve a ſymptom." *Ibid.* p. 634. Doctor *Dillenius*, to the virtues given by *Schroder* to the mentha ſativa, as tranſcribed by Mr. *Ray* in *Syn.* adds, "Quæ vires tum omni menthæ, tum, præ aliis, piperatæ competunt. "Singulares namque & præcipuas vires obtinet in ventriculi languore & di-"arrhæa ſimplici inde dependente, tum herba ipſius ſimplex, tum aqua de-"ſtillata uſurpata. Sed oportet eam, ob partium volatilitatem, igne valde "leni, & in balneo vaporis vel mariæ deſtillare; alias enim inſipida prope "prodit. Id unum mentharum encomio detrahere videtur, quod genituram "extinguere auctores non vani tradiderunt." *R. Syn.* p. 235. Yet the *Lond. Diſp.* ordered both for the ſimple and ſpirituous pepper-mint water the dried leaves to be taken.

It is true that *Hippocrates* ſays: "Mentha (μινθη) calefacit & urinam ciet, "vomitionemque ſiſtit; ac ſi quis eam ſæpe comedat, ejus genitale ſemen col-"liquefacit ut effluat, & arrigere prohibet, corpuſque imbecillum reddit." *De victus ratione lib.* 2. *Foeſ.* p. 359. lin. 40. He ſays alſo: "Scolopendrium, "mentha, ſeſeli, caucalides, hypericum, urticæ alvum movent & purgant." *Ibid.* p. 360. l. 8. Whereas according to *Dioſcorides*, "Mentha aſtringendi "atque exiccandi vi prædita eſt, & venerem ſtimulat." l. 3. c. 41. p. 189.

"Noſtrates mentham piſis & fabis incoquere ſolent ad eorundem flatulen-"tiam corrigendam." *R. H.* The pulegium cervinum, tho' preferred to the other by the Phyſicians of Montpelier, (*Lob. Adv.* 214.) and at leaſt as good as that, is never uſed here: neither is the mentha cataria.

SECT.

SECT. III.

They may be uſed any way. We have an aqua, oleum, and conſerva menthæ; and aqua and oleum pulegii. The oils can be given to very few drops with ſugar and well diluted; for there is danger even in the newly diſtilled waters, before the oil is ſeparated. Mint is uſed in the aqua abſinthii compoſita, aq. alexiteria: and its oil in the pilulæ ſtomachicæ, unguentum nervinum, emplaſtrum ſtomachicum: and the pulegium is an ingredient in the aqua bryoniæ compoſita, and trochiſci de myrrha; and its oil, in ung. nervinum. There are in the *New London Diſpenſatory* menthæ aqua ſimplex, aqua ſpirituoſa, conſerva, and oleum; pulegii aqua ſimplex, aqua ſpirituoſa and oleum; and menthæ piperitidis aqua ſimplex, aqua ſpirituoſa, and oleum. But they are in none of the compoſitions, except the oleum menthæ in the empl. ſtomachicum.

MERCURIALIS.

SECT. I.

Mercurialis, Mercurialis mas & fœmina. *Off.* Mercurialis teſticulata; ſive mas Dioſcorides & Plinii: & Mercurialis ſpicata, ſive fœmina Dioſcorides & Plinii. *B. P.* 121. *T.* 534. *H. Ox.* ii. 612. M. maſ. & M. fœmina. *Dod.* 658. *Ger.* 332. M. mas & fœmina. *J. B.* ii. 977. M. vulgaris, mas & fœmina. *Park.* 295. M. annua, glabra, vulgaris. *R. H.* 163. *Syn.* 139. Mercurialis caule brachiato, foliis glabris. (fœmina & mas) *H. Cliff.* 461. French mercury, the male and female.

It grows on the Sea Beach near Ryde in the Iſle of Wight plentifully. *R. Syn.* "It grows frequently in gardens, and in waſte places, and among rub-"biſh." *Miller Bot.* 294. The herb is uſed. The female, but falſly ſo called, flowers in July and all ſummer; the other ripening the ſeed in autumn.

"Linozoſtis, ſive parthenion mercurii inventum eſt, ideo apud Græcos "hermupoan multi vocant eam, apud nos omnes mercurialem. Duo ejus ge-"nera maſculus & fœmina, quæ efficacior, &c." *Plin.* l. 25. c. 5. p. 632. "Λινοζωστιν ὁι δε παρθενιον, ὁι δε Ἑρμαθοτανιον καλεσι. &c. Linozoſtin ali-"qui, parthenion alii mercurii herbulam appellant. Folia habet ocimi, hel-"xinæ cognata, ſed minora: ramulos duplici geniculorum nodo cinctos, & "alarum cavis multis iiſque denſis præditos: ſemen fœminæ quidem racemo-"ſum atque copioſum; mari vero, juxta folia, parvum ac rotundum, ceu "binos teſticulos una cohærentes. Totus autem frutex dodrantalis eſt, aut "etiam major. Utraque alvum ciet, &c." *Dioſcor.* l. 4. c. 191. p. 320. *Theophr.* 9. *Hiſt.* 10. Φυλλον cenſetur." *B. P.* 121.

As in the *Old London Diſpenſatory* the bonus henricus *J. B.* and *Ger.* are uſed for the mercurialis, being more common, and as good; ſo here for the ſame reaſon, the following plant is the only mercurialis of our ſhops.

Mercurialis montana, teſticulata: & mercurialis montana, ſpicata. *B. P.*

122. *T.* 534. *H. Ox.* ii. 613. M. ſylveſtris, ſive cynocrambe. *Dod.* 659. M. mas & M. fœmina. *Fuch.* 475. M. ſylveſtris, cynocrambe dicta, vulgaris. *Park.* 295. M. perennis, ſylveſtris, cynocrambe dicta. *H. Ox.* ii. 613. M. perennis, repens, cynocrambe dicta. *R. H.* 163. *Syn.* 138. Cynocrambe. *Ger.* 333. Cynocrambe mas & fœmina; ſive mercurialis repens. *J. B.* ii. 979. Mercurialis, caule ſimpliciſſimo, foliis ſcabris (fœmina & mas) *H. Cliff.* 461. Cynocrambe. *Offic. Dale.* 69. Dogs-mercury, or wild-mercury.

Cynia, ſeu cynocrambe, aliis mercurialis ſylveſtris, mas cauliculum emittit "binum palmorum altitudine, mollem ac ſubalbidum: folia mercuriali aut "Hederæ ſimilia, certis interſtitiis candicantia; ſemen foliis adjacet, parvum "ac rotundum. Folia cum caulibus, olerum inſtar potæ, vim alvi ciendæ "habent. Jus vero decocti, bilem, aquoſaque detrahit." *Dioſcor.* l. 4. c. 192. p. 321.

It is common in woods, rocky places, &c. The herb and leaves are uſed.

SECT. II.

It is diluent, emollient and laxative; ſaid to purge bile and waters; and commended internally in the jaundice, menſibus obſtructis, childrens gripes, &c. but is uſed only externally in clyſters, cataplaſms, &c. The dogs-mercury has been reckoned of the ſame nature; but the bad effects it had on ſome people in Shropſhire give cauſe to ſuſpect it as virulent. It is ſafe enough however in the decoctum com. pro clyſtere.

"*Officin.* Folia. *Vires.* Calfacit & ſiccat 1. alvum movet (bilem ac aquas "purgat). Extrinſecus vulvæ adhibita menſes & ſecundinas trahit, tumores "emollit, creberrimi uſus in clyſteribus. *N.* Sunt e noſtratibus mulierculis "quæ mercurialem infantibus cum pappa exhibent, ut alvum ſolutam reti-"neant, torminaque præcaveant. *Præp.* 1. Aqua ſtillat. ex herba floreſcente. "2. Syrupus, de ſucco. 3. Mel mercuriale. *N.* adhibentur potiſſimum in cly-"ſteribus." *Schrod.* p. 625. "Aquoſis mollibus emollientibus adnumeratur in *Boerh. Lib. de M. M.*

1. It is of an herbaceous taſte and ſomewhat nauſeous, without ſmell. "Folia ſapore nitroſo, calidiuſculo & nauſeoſo." *J. B.* "Saporis ſunt herba-"cei." *Nucl. Belg.* 194. "It is of an herbaceous taſte, a little ſaltiſh, (or "herby taſte, as ſome tranſlate it;) and does not redden the blue paper. "By a chymical analyſis, it gives much volatile ſalt, much oil and much "earth." *T. Hiſt.* p. 213.—2. It is one of the famous five emollient herbs; and though not acrid, yet ſaponaceous, and ſo more than a ſimple diluent. It is very juicy (is it nitrous?) and ſo may be called deobſtruent as well as laxative.—3. It is commended in ſeveral diſeaſes. "The water in which it "has been macerated cold for twenty-four hours is given for the dropſy, "cachexy, vapours, and green-ſickneſs: the plant is uſed alſo in ſemi-"cupiums, for ſuppreſſion of the menſes, being very emollient; and ſucci "℥ij. depurated and mixed with tinctura martis ʒij. are given for barrenneſs. "Mercury is uſed in the ſyrup de longue vie: (which is here deſcribed: it "is ſometimes called ſyrup de mercurialis compoſitus, ſyrup de gentiana, &c. "vid. *Lem. Ph.* 132.) It keeps the belly open, purifies the blood, preſerves

"from

" from the gout, ſciatica and the like maladies." *T. Hiſt.* p. 213.—4. Herbæ Thea is of a greeniſh colour at firſt; taſtes of the herb; reddens a little the ſol heliotropii; but only dilutes ſyr. violarum, and ſolutio vitrioli.—5. We retain the antient mel mercuriale for clyſters. The *Lond. Diſp.* rejects mercury altogether. But

The dogs-mercury is of a more nauſeous taſte, and ſomewhat fetid. " Radix ſapore nonnihil dulci, ſed faſtidioſo; folia guſtu nauſeoſo. Dodonæo " tota herba viroſi odoris ingratum redolet." *J. B. R. H.* " Folia guſtu nau- " ſeoſo, odoris viroſi ingrati. In cibo oleris modo ſumpta gratior quam " communis videtur, & alvum bene ſolvit." *Boecler. Cynoſ.* 3. 351. " Cy- " nocrambe a ruſticis inter olera recipitur; ſed tum ſæpe inde in vomitum " incidunt." *Boerh. Hiſt. Pl.* dicta p. 580. There is in the *Phil. Tranſ.* No. 203. for *September* 1693. p. 875. (or *Abridg.* ii. 640.) by *Sir Hans Sloane*, an account of what happened to a man, his wife, and three children, one of which died, on their eating of this herb, fried with bacon, to ſupper: which ſeems to evince that it is not only cathartic, but alſo narcotic. vide *R. Syn.* 139. where it is tranſlated. Yet I am much miſtaken if it be not uſed in diet-drinks by our people in the weſt ſometimes. *Is the French mercury ever taken for the mel mercuriale here?*

NASTURTIUM.

SECT. I.

Naſturtium, Naſturtium hortenſe, *offic.* Naſturtium hortenſe, vulgatum. *B. P.* 103. *T.* 213. N. hortenſe. *Dod.* 711. *Ger.* 250. *Park* par 500. *R. H.* 825. N. vulgare. *J. B.* ii. 912. N. vulgare, ſeu hortenſe, tenuiter diviſum. *H. Ox.* ii. 300. Lepidium foliis oblongis, varie diviſis, vel inciſis. *H. Cliff.* 331. Common garden-creſſes.

Where it grows naturally I cannot find; but it is commonly ſown in gardens; as is alſo the N. hortenſe latifolium. *B. P.* & N. hortenſe criſpum *ejuſdem*; which is either broad or narrow leaved. The leaves and ſeeds of any of them are uſed. In the ſpring it flowers ſometimes in three or four weeks after it is ſown; and ripens in May or June, or ſooner.

" Naſturtium nomen accepit a narium tormento. Et inde vigoris ſigni- " ficatio proverbio id vocabulum uſurpavit, veluti torporem excitantis. In " Arabia miræ amplitudinis dicitur gigni." *Plin.* l. 19. c. 8. p. 505. " Καρ- " δαμον καρηδαμον, quia caput acri calore ſuo tentat. Unde in pigros, ig- " navos & deſides, Græcus eſt proverbium καρδαμον ἐσθις. *Naſturtium comede.*" Vide *Dalecamp. in Plin.* p. 507. Annot. 99. *Dioſcorides*, l. 2. c. 185. p. 152. does not deſcribe it. 2. Naſturtium aquaticum. *offic.* Naſturtium aquaticum ſupinum. *B. P.* 104. *H. Ox.* ii. 223. N. aquaticum. *Dod.* 592. N. aquaticum, ſive Cratevæ ſium. *Ger.* 257. N. aquaticum vulgare. *Park.* 1239. *R. H.* 816. Siſymbrium aquaticum. *Matth.* 379. *T.* 226. Siſymbrium, Cardamine, ſive Naſturtium aquaticum. *J. B.* ii. 884. *R. Syn.* 300. Cratevæ ſion. Erucæ folium, *Lob.* 105. Siſymbrium, foliis pinnatis, foliolis ſubcordatis. *H. Cliff.* 336. Common water-creſſes.

It grows in ditches, ſprings, and watry places, flowering in June. The herb is uſed. " *Officin.* folia, ſeu herba cum floribus." *Schrod.* 633. " Folia." *Ph. Lond.* 14. It ſeems to be the ſiſymbrium alterum dioſcoridis. " Si- " ſymbrium alterum, aliqui cardaminen, alii & hoc etiam ſion appellant. " Aquatica eſt herba, in iiſdem locis quibus ſion proveniens; cardamine vero " vocant, quod guſtu naſturtium repræſentat. Folia primum rotunda pro- " deunt, augeſcentia vero, erucæ modo finduntur." *Dioſcor.* l. 2. c. 156. p. 142.

SECT. II.

They agree in virtues with redcole and ſcurvygraſs, and are uſed the ſame way. The firſt is more common at the tables than in ſhops: the laſt affords one of the antiſcorbutic juices, and enters the aqua Raphani compoſita, and unguentum antipſoricum.

" Naſturtii hortenſis ſemen & herba ſicca calfaciunt & ſiccant 4, (herba " viridis mitior eſt.) Utrumque attenuat, aperit, abſtergit. *Uſus præcip.* eſt " in tumido liene, menſibus obſtructis, fœtuque mortuo expellendo; tarta- " ream mucilaginem pulmonum incidit, ſcorbuto confert. Vulgo itidem ad " expellendos morbillos inſervit ſemen extrinſecus uſu venit in apophlegma- " tiſmis, errhinis, phænigmis: furfures & ſcabiem fœdam capitis, aliarumque " partium ſanat (tritum aut frixum, cumque porci axungia illitum.) *Schroder.* " p. 633.

" Naſturtium aquaticum calfacit & ſiccat 2, (exſiccatum 3,) attenuat, ape- " rit. *Uſus præcip.* in calculo ac ſabulo, obſtructione lienis, ac epatis, men- " ſiumque, ſpecifice in ſcorbuto commendatur. N. præſtat recens adhibuiſſe " quam exſiccatam, ob ſal volatile paulatim evaneſcens. *Præpar.* 1. Succus " inſpiſſatus. N. cum aceto naribus illitus, arcet immoderatas vigilias: po- " lypum extirpat ſuccus naribus inditus. 2. Aqua ſtillat. ex integra planta " collecta auguſto. 3. Spiritus, ex herba contuſa, addito tantillo fermento, " fermentata." *Scrod.* 633.

1. Creſſes are very hot and biting, yet generally the moſt agreeable of all ſuch acria volatilia, &c. to the taſte, and have a pungent ſmell. Its acrimony is volatile, flying off in drying or decocting; and it inflames and ulcerates the ſkin; and is commended in the ſame diſeaſes with horſe-radiſh. " Eſt naſtur- " tii ſemini natura ſinapis & erucæ ſemini ſimilis, lepras & impetigines ex- " terit; &c." *Dioſcor.* l. c. — 2. Water-creſſes taſte ſomewhat like the common, but are bitter, and not ſo hot, and partake more of the nature of cochlearia, than armeracia; yea are evidently alcaleſcent.—3. Both are commended in the ſcurvy, dropſy, palſy, gravel, &c. " Water-creſſes are acrid, and " do not redden the blue paper. By a chymical analyſis from this plant are " got much acid, and much alcali, little urinous ſpirit, little ſulphur, and a " good deal of earth." *T. Hiſt.* p. 231. Such analyſes ſometimes want confirmation.

NICO-

NICOTIANA.

SECT. I.

Nicotiana, Tabacum, Petum, *offic.* Nicotiana, major, latifolia. *B. P.* 169. *T.* 117. *H. Ox.* ii. 492. N. major; ſive Tabacum majus. *J. B.* iii. 629. Hyoſcyamus Peruvianus. *Dod.* 452. *Ger.* 357. Sana ſancta Indorum. *Lob. Adv.* 251. Tabacco latifolium. *Park. Par.* 363. *R. H.* 713. Nicotiana, foliis lanceolatis. *H. Cliff.* 56. Broad-leaved tobacco.

It grows in many places of America ſpontaneouſly; and is there alſo, as well as in many parts of Europe, cultivated with great care; being one of the moſt conſiderable branches of commerce betwixt the old and new world. In our gardens, if raiſed on a hot-bed, it will flower in July; and if ſheltered from the winter's cold will live ſeveral years, flowering and ſeeding plentifully. There are ſome varieties of it, but all equally medicinal; though ſome are more, others leſs agreeable to the taſte and ſmell of ſuch as habitually uſe it. The leaves only are uſed.

Tobacco came firſt into Europe about the middle of the ſixteenth century. "Nicotiana a Jo. Nicotio regis Galliæ conſiliario dicta, cujus opera, anno "1560 Galliis innotuit, quam Ulliſſiponæ, dum legati munere fungeretur, a "Belga e Florida inſula allatam, accepit." *B. P.* Nicot carried it into France in 1559 according to *R. H.* "Allatum tabaco fuit e Florida Americæ, præ-"ſertim adjacente inſula tabaco, unde nomen habet, circa annum 1558 & "1559. Uliſiponæ in Luſitania a Joan. Nicotio legato Gallo, nicotiana dicta; "a Nic. Tornabono, Italo epiſcopo, in Galliam Legato, Tornabonia, a Cæſ. 8. "Hiſt. 43. Accepit vero etiam nomen a regina matre, Catharina Medicea, "a cardinale S. Crucis, a magno priori neſcio quo imo vero & ab effectu, "panacea, herba ſancta, ſana ſancta." *Hoffm.* p. 260. "Braſilianis, a qui-"bus ſemen primum in Luſitaniam delatum, dicitur petum; Galli, quod D. "J. Nicotius, regius aliquando in Luſitania orator, ejus ſemen primus ad "reginam matrem detulerit, illiuſque facultates docuerit, nicotianam, & "herbam reginæ nominarunt." *Cluſ. Exot.* 309. "Uſum fumi nicotianæ "primus in Angliam intuliſſe dicitur D. Gualterus Raleigh ex America redux, "ubi ſervos & mancipia eo uſos obſervavit, ad ſomnum conciliandum." *R. H.* "There has been a great deal ſaid about this plant, by ſeveral authors, par-"ticular treatiſes having been wrote on it." (*Miller Bot.* 312.) and theſe not a few. Seguierius, in Bib. Bot. p. 446. names near fifty authors on it; as Monardes, Stephanus, Everhartus, Jacobus VI, Thorius, Neander, Paulli, &c.

SECT. II.

It is a violent emetic and cathartic, and yet a narcotic anodyne; called pectoral and vulnerary; and commended internally for phlegmatic infarctions of the lungs, lethargies, dyſentery, &c. and outwardly as anodyne, diſcutient, and detergent; yea and as emetic, in clyſters, cataplaſms, epithems, errhines,

errhines, &c. But it is ſnuffed up, ſmoked, and chewed much more for amuſement, than for its medicinal virtues.

" Herba recens calfacit & ſiccat 2, ſiccat a 3, (aliis calfacit 1, ſiccat 2, " aliis refrigerat) abſtergit, incidit, reſolvit, aliquantulum aſtringit, reſiſtit " putredini. Sternutatoria eſt, apophlegmatizans, anodyna, vulneraria vo- " mitoria, &c. *Uſus præcipue externi* ad catarrhos cerebri exſiccandos, ſom- " num inducendum, laſſitudinem ex labore diſcutiendam, uteri ſtrangulatum " compeſcendum: a peſte præſervat (in ſuffitu) ſedat dentium dolores, diſ- " cutit tumorem uvulæ (in gargar.) medetur lichenibus, phthiriaſi, porrigini, " achoribus ac favo; mundificat ac conſolidat vulnera ac ulcera inveterata, " ſanat ambuſta quoque modo adhibita (balneatione ſcil. vel ſola impoſitione " foliorum recentium noſtratis nicotianæ, &c.) Nec tamen prorſus uſum " quoque ſubterfugit internum, dum pro vomitorio exhibetur (ſat violento) " qua ratione curat febres, ſimileſque morbos. Sed cautione hic opus eſt. " N. 1. Non adeo proficuus tabaci uſus eſt juvenibus ac bilioſis. N. 2. " Novi qui mictionem nocturnam veſpertino tabaci ſuffitu præcavebat. " *Præp.* 1. Aqua, ex foliis. 2. Syrupus de nicotiana. Utrumque cum " ſucceſſu exhibent in aſthmate, pulmonumque tartaro, quin & in febribus. " 3. Oleum peti ſtillat. 4. Oleum per infuſionem. 5. Sal ex cinere. 6. " Unguentum de nicotiana. 7. Balſamum." *Schrod.* 635.

1. It is of an acrid, oily, bitteriſh and nauſeous taſte; and ſtrong pungent ſmell. I mean the *Virginia* tobacco; for I have raiſed ſome here, that had little either taſte or ſmell: but what I had from Mr. Philip Miller, viz. Nicotiana major anguſtifolia. *B. P.* and which for many years has yielded plenty of ſeed, had, and ſtill the plants raiſed from it have, a very hot, biting, bitteriſh taſte, and ſmell like the *Brazil* tobacco. " Folia ſapore acido & fer- " vido, ſed evanido. Tota planta (viz. latifolia) odorem habet ſatis gravem." *J. B. R. H.* " Odor reſinoſus non ingratus, ſapor acris & mordax. In offi- " cinis uſurpabantur olim folia tantum: nunc tantus eſt abuſus foliorum ſic- " catorum, pro fumo quotidiano, ut mirabile ſit dictu." *Hoffm.* p. 260.— 2. It kills lice and other vermin, and F. Redi ſays the chymical oil conveyed into a wound is as mortal as the poiſon of a viper. Vide *Red.* Experiment. p. 8. & 315. " *Viganus* (in chym. p. 36.) oleo hoc fœtido feles enecari dicit, " dummodo una guttula ſtilletur in linguam. Vide Jo. Jac. Harder. in A- " piario Obſ. 1—7." Herman. Cynoſ. p. 542.—3. Externally applied, the juice of the green leaves inſtantly cures the ſtinging of nettles. Tobacco is ſaid to diſcuſs œdematous and ſcrophulous tumors, cure the itch, phagedenic ulcers, &c. as it certainly thus proves often emetic. *Vid. Med. Eſſ.* Vol. II. Art. 5. " Exemplum violentæ vomitionis ſemper immediate ſequentis in- " ſperſionem pulveris tabaci ſuper femur contuſum & laceratum, habetur " Ephem. Germ. ann. 12. obſ. 108." *R. H.* Dr. *Stevenſon* informed me of an inſtance of the ſame kind, from a leaf of tobacco applied to a ſore arm. I knew a ſmall bit of tobacco put into the noſe only, cauſe ſickneſs, vomiting and purging pretty ſeverely. The ſame effect it has had in clyſters: and it is commonly known that even the ſmoke of tobacco, at firſt uſing it, ſeldom fails to make the ſmoker vomit; ſo little is its nature altered by burning. Hence this ſmoke conveyed into the anus, has ſometimes proved ſucceſsful in the Iliac paſſion, when other remedies failed, both by diſtending and ſti-

mulating the guts. But it is as well known that habitual ſmokers aſcribe many virtues to it, and cannot want their pipe. The ſame is true alſo of chewing tobacco.

Chewing of tobacco drains off a conſiderable quantity of that very uſeful and neceſſary juice, the ſaliva; and ſo is ſaid to make people lean, of which *Borellus* gives an inſtance; and to be beneficial only to fat and phlegmatic perſons, *R. H.* 715. Nevertheleſs, if we conſider that thus the excretories of the glands of the mouth and fauces are kept open; the belly eaſy; tooth-aches and other rheums often prevented or cured; the breath ſweetened, &c. we may eaſily ſee that it may be very uſeful in other caſes. Mr. *Ray*, after quoting Borelli's obſervation, adds, "At maſticatio tabaci non in omnibus "eundem effectum habet, ut experientia didici in amico quodam noſtro, qui "ob id nihilo macilentior factus eſt: affirmavit tamen ejus uſum dentes antea "vacillantes firmaſſe." *(l. c.)* And I have known the lean and conſumptive grow more luſty and corpulent after chewing tobacco for ſome time; and more decays, phthiſical coughs, and aſthmas thus cured, than by any other remedy whatſoever: to ſay nothing of the advantage of the ſickneſs and vomiting it at firſt occaſions. I cannot ſo much commend ſmoking, becauſe it dries the throat more, and makes the breath, and every thing about one, ſtink of a foul tobacco-pipe: yet it has ſeveral of the effects of chewing, and many old men are cuſtomary ſmokers: and our country people, that like a pipe, uſe to ſay, *Tobacco reek, tobacco reek, it makes me hail when I am ſick. Tobacco reek, tobacco reek, when I am hail it makes me ſick.* Neither does ſnuffing want its own uſe. Tobacco makes a good errhine: nor do I know any prejudice it can do, if it be not from its carrying along with it into the ſtomach much of the mucus narium, which in great ſnuffers it can ſcarce fail to do, when they ſleep: and few would like to ſwallow theſe lumps of ſnot, like oyſters or leeches, which they frequently hauk up in the day-time. Beſides, I have heard of an uneaſineſs in the ſtomach which could not be cured, till the patient threw up balls of ſnuff. This however ſeldom happens; and always might be eaſily prevented by taking the leaf inſtead of the powder. However, ſeldom do ſnuffers own it does any prejudice: and although it did more, it would not be eaſy to diſſuade them from uſing it. So, with Boeclerus (in Cynoſ. Herm. 544.) "Naribus "tabacophilis & fumibibulis, ſuam relinquimus conſuetudinem incorrigibi-"lem."

"Tu vero expectas a me judicium de fumi uſſu illo quotidiano? Audivi "ab amico, ex Anglia reduce, ſereniſſ. olim R. Jacobum VI. publice in "academia Oxonienſi, diſputaſſe contra hanc fatuitatem, oſtenſis exemplis "illorum, qui laboraſſent quidem diu inſanabilibus pectoris morbis, deliriis, "inſomniis, convulſionibus, &c. poſt mortem autem inventi fuerint pulmones "habuiſſe totos nigros & retorridos, non ſecus ac ſi fumo indurati eſſent. "Audivi a militibus in Belgio verſatis, vidiſſe ſe diſſecta capita eorum, quibus "patera cerebri, ab anatomicis dicta, tota interius eſſet nigra, licet a carnifice "interiiſſent. Audivi a patricio Norico, qui, in ſuperiori bello Bohemico, "vidit omnes, qui in conflictu cum hoſtibus interierint, Anglos, habere talia "capita. Hinc diſcant ſapere illi, qui ſapere alias nolunt." *Hoffman.* p. 261. § 30.—As to its effects in capite,

"Idem

" Idem nobis affirmavit D. Boucheret Pharmacopœius Londinenſis. Si " hæc vera ſint (de quo tamen eſt cur dubitem) non inde tamen ſequitur fu- " mum nocivum eſſe, cum multos novimus, qui quotidie & copioſe per plu- " res annos eo uſi ſunt, ſanos tamen & validos vitam ad extremam ſenectu- " tem produxiſſe, nec ullum inde incommodum, ſed potius maximum juva- " men percepiſſe: aliis enim ventriculum refocillat & concoctionem promovet, " aliis alvum leniter ſolvit: alii nullum inde commodum, at neque damnum " ſentiunt, quibus uſus ejus adiaphorus eſt." *R. H.* 714.—4. It is alſo commended as a vomit, for inveterate agues, aſthmas, and manias. But how to regulate the doſe is not eaſily directed; for a few grains may prove as violent to one, as ſo many drachms will to another of the ſame age and ſtrength. Tantum valet conſuetudo. Dr. *Pitcairn* made Mr. *A. Niſbet*, the famous herald, infuſe an halfpenny twiſt of tobacco in a bottle of ſmall beer, for a night, and take a draught of it in the morning for his aſthma: he told me it operated violently, and relieved him conſiderably for ſome time. " Commendo " uſum tabaci in peſte; me enim liberabat peſte correptum: omneſque fere " domus in quibus hæc planta vendebatur, & Noviomagi, & Londini liberæ " erant a contagio, cum vicinæ infectæ eſſent. *Diemerb. de peſte.*" *R. H.* 715. " Many extol it (ſmoking) as a preſervative from the plague; but Rivinus " ſays, that in the plague of Leipſic ſeveral died who were great ſmokers of " tobacco." *Miller Bot.* 313. " Novi tres juvenes robuſtiſſimos a dyſenteriis " liberatos propinando decoctum tabaci, quod maxima ſua violentia, totam " mali cauſam evacuavit, & reliquit anodynam & narcoticam qualitatem. " *Diemerb. obſ. med.* 19." *R. R.* 715. But, *de doſi altum ſilentium.*

Q. 1. Will the habitual uſe of one narcotic enable one to take with ſafety a larger doſe of another narcotic than otherwiſe he could? *Forte.*

2. May not narcotics prove alſo alexipharmics, or at leaſt prophylactic?

NYMPHÆA. *Vide* Roots.

OCIMUM.

Ocimum Braſilicum *offic.* Ocimum vulgatius. *B. P.* 226. *T.* 204. *R. H.* 541. Ocimum medium, vulgatius. *Lob. Adv.* 215. *H. Ox.* iii. 406. Ocium medium, vulgatius, & nigrum. *J. B.* iii. 247. Ocimum medium citratum. *Ger.* 673. Ocimum vulgare majus. *Park.* 18. Ocimum, foliis, ovatis, incanis. *H. Cliff.* Common-Baſil.

Where it grows wild I know not: raiſed on a hot-bed it flowers in July or Auguſt. The herb is uſed. " *Offic.* Folia ac ſemen." *Schrod.* 544.

Ocimum ὠκιμον, ab ὠκυς, celer, velox, quod celeriter a ſatione, viz. tertio die proveniat: vel, ut alii, ab ὀζειν, redolere. Vide *Bod. in Theoph.* p. 755. Pliny diſtinguiſhes between Ocymum and Ocimum. " Ocymum, quod in " vinca ſeri jubet, antiqui appellabant pabulum, umbræ patiens, quod celer- " rime proveniat." *Plin.* l. 17. c. 22. p. 432. " Apud antiquos, erat pabuli " genus, quod Cato ocymum vocat, quo ſiſtebant (ciebant, ex. *Varr.* vel cita- " bant) alvum bubus, &c." *Plin.* l. 18. c. 16. p. 461. " Omnia (ſata) " pari tempore nequaquam proveniunt, ſed alia celerius, alia ſerius. . .

" Celerrime ocimum, blitum, eruca, raphanus. Die namque tertio (ut ita " loquar) erumpunt. Lactuca, 4 aut 5. cucumis & cucurbita, 5 aut 6. &c." *Theoph.* l. 7. c. 1. p. 731. *Plin.* l. 19. c. 7. p. 501. " Ocimum quoque " Chryſippus graviter increpuit, inutile ſtomacho. . . Præterea inſaniam facere " & lethargos. . . Addunt quidam, tritum ſi operiatur lapide, ſcorpionem " gignere; commanducatum & in ſole poſitum vermes afferre." *Plin.* l. 20. c. 12. p. 523. And ſome grave authors relate that much ſmelling at baſil has bred ſcorpions in the brain. Vide *Bodæum in Theoph.* p. 756. & *R. H.* 541.

N. B. " Ocimum ſiccum eſt & calidum, & alvum ſiſtit." *Hippoc.* de victus ratione. l. 2. p. 359. lin. 34. " Ocimum humidum & frigidum eſt, (και " ευκαρδιον) orique ventriculi gratum." *Hippoc.* ad ſcrip. liber de affectionibus. p. 529. lin. 27. In both theſe places it is ωκιμον. " Vomitum ſolvit, ωκυμυ " χυλος in vino albo." Notha ad calcem lib i. de morb. mul. p. 635. lin. 2. " Ocimum vulgo notum." *Dioſcor.* l. 2. c. 171. p. 146. It is called ocimum βασιλικον, in *Aetius* Serm. 1. col. 58. Vide *Hoffman.* p. 121.

SECT. II.

It is aromatic, but not acrid; called pectoral and uterine, alſo cephalic, cordial, carminative, &c. But it is little uſed, being now expelled the aqua bryoniæ compoſita.

" Calfacit, humectat, digerit, reſolvit, expurgat pulmones, menſes movet, " ideoque uſurpari poterit uſu interno & externo, ſed rarius adhibitum de- " prehenditur. *Præp.* aqua, ex integra planta collecta Junio." *Schrod.* 544. Antacida eſt in *Boerh.* Lib. de M. M.

1. It has a ſoft, watery, aromatic taſte, and fragrant ſweet ſmell, which it retains, in part, even after it is long and well dried. The ſeed affords an antacrid mucilage. " Folia odore fragranti, ſapore nullo excellenti." *J. B. R. H.* " Odoris eſt fragrantis; ſaporis aromatici, calidi, acris." Nucl. Belg. p. 40.—2. It is commended in the vertigo, lipothymy, aſthma, &c. Viribus cum meliſſa convenit.

ORIGANUM.

SECT. I.

Origanum, Origanum vulgare. *offic.* Origanum ſylveſtre, Cunila bubula *Plinii. B. P.* 223. *T.* 198. Origanum ſylveſtre. *Dod.* 285. Origanum vulgare, ſpontaneum. *J. B.* iii. 236. *R. H.* 539. *Syn.* 236. Origanum Anglicum. *Ger.* 666. Origanum ſylveſtre, vulgare *Tragi. H. Ox.* iii. 359. Majorana ſylveſtris. *Park.* 12. Origanum, foliis ovatis; ſpicis, laxis, erectis, confertis, paniculatim digeſtis. *H. Cliff.* 305. Wild or Field Marjoram.

It grows in thickets, &c. flowering in July. The herb, rather leaves and tops are uſed. Origanum, q. ὀρεγανος, montis gaudium, quod locis montanis delectetur. Vide *Bod. in Theoph.* p. 562. It is the origanum onites according to ſome, but the origanum ſylveſtre of Dioſcorides according to others. Per-

haps it is neither. " Quod ὄνητις appellatur, foliis eſt (Heracleotico) candi-
" dioribus, hyſſopoque ſimilius: ac ſemen habet veluti corymbos cohærentes,
" ac ſibi invicem incumbentes. Vis tamen eadem quæ Heracleotico, at minus
" efficax. Origanum ſylveſtre (ἀγριοριγανος) aliqui panaces Heracleion vocant,
" alii κονιλην; foliis eſt origani, viz. guttis dodrantalibus, tenuibus, in quibus
" umbellæ anetho ſimiles inſunt; flores candidi; radix tenuis ac inutilis.
" Privatim venenatorum morſibus folia & flores, ex vino in potu auxiliantur."
Dioſcor. l. 3. c. 33 & 34. integra. p. 186. Vide *Plin.* l. 20. c. 16. p. 528.
" Cunilæ, ait, præter ſativam, plura ſunt in medicina genera. Quæ bubula
" appellatur ſemen pulegii habet, utile ad vulnera, &c."

SECT. II.

It is a ſtimulating aromatic, or an attenuating diaphoretic; called cephalic, pectoral, ſtomachic, and uterine; and is commended internally in lethargies, aſthmas, vapours, &c. Cum majorana convenit. But it is more uſed outwardly in baths, &c. The eſſential oil is reckoned good for the tooth-ach.

" *Offic.* Folia cum floribus ſeu ſummitatibus. *Vires.* Calfacit & ſiccat 3.
" abſtergit, aſtringit. *Uſus præcip.* In obſtructione pulmonum, epatis ac uteri,
" & hinc in tuſſi, aſthmate, ictero: auget lac; ichoroſa excrementa per ſudor-
" em expellit (ante balneum aſſumptum). Extrinſecus uſu venit crebriori:
" eoque in balneis uterinis, cephalicis, totius corporis (contra ſcabiem).
" *Præp.* 1. Aqua ſtillat. ex integra planta cum floribus. 2. Oleum ſtillat.
" (raro proſtat). 3. Sal ex cinere (raro itidem paratus). *Schrod.* 639." Antacidum, attenuans, acre aromaticum, eſt in *Boerh.* Lib. de M. M. *N. B.* Ung. nervinum.

It is of an acrid aromatic taſte, and fragrant ſmell, ſomewhat like that of marjoram, but not ſo ſweet. " Foliorum ſapor acer, aromaticus, odor ſua-
" vis." *J. B. R. H.* " Saporis eſt valde calidi & acris, odoris valde grati
" aromatici. Eſt aperitivum, diaphoreticum, cephalicum, ſtomachicum, car-
" minativum, bechicum, diureticum, antihyſtericum, emmenagogum, ano-
" dynum, reſolvens, &c." *Nucl. Belg.* 217. " It is acrid, aromatic, deter-
" ſive, and reddens very little the blue paper. . . It ſhould be uſed by way
" of tea in the aſthma, violent cough, indigeſtion, pleuriſy. It is put into
" pediluviums, and ſemicupiums, for vapours, green-ſickneſs, and palſy."
T. Hiſt. p. 217.

LECT.

LECTURE LIX.

PÆONIA. *Vide* Roots.
PAPAVER. *Vide* Opium.

PARIETARIA.

SECT. I.

PArietaria helxine. *Offic.* Parietaria, officinarum, & Dioſcoridis. *B. P.* 121. *T.* 509. *H. Ox.* ii. 600. Parietaria. *Dod.* 102. *J. B.* ii. 976. *Ger.* 331. *R. H.* 206. *Syn.* 158. Parietaria vulgaris. *Park.* 436. Parietaria, foliis lanceolato ovatis. *H. Cliff.* 469. Pellitory of the wall.

It grows on walls, and in rubbiſhy places; flowering in June and July. " Helxine a ſemine aſpero, veſtibus tenaciter adhærente: περδίκιον Galeno 6. " ſimpl. quod perdices hac delectentur. *Plin.* l. 22. c. 17. Helxine & per- " dicium. Parietaria, quod in parietinis exeat, unde muralis herba." *Celſ.* l. 2. c. 33. *B. P.* " Vitriaria & urceolaris dicitur, quod ob nitroſitatem ſuam, " tergendis urceolis & vitreis vaſis efficax ſit." *R. H.* 205.

" Helxine, quam nonnulli parthenium, alii perdicium, alii ſideritin, ſeu " Heracleam; alii vitrariam ſeu urceolariam, alii ixinen ſylveſtrem, alii cliba- " dion, alii denique polyonymon, appellant, naſcitur in maceriis & parietinis. " Cauliculos profert tenues ac leviter rubentes; folia mercurialis, hirſuta; & " circa caules velut exigua ſemina, aſpera, veſtibus adhæreſcentia." *Dioſcorid.* l. 4. c. 86. p. 278.

SECT. II.

It is diluent, emollient, and diuretic; called pectoral, nephritic, and vulnerary; and is commended internally in the ſtrangury, gravel, ſtone: but is more uſed in clyſters and cataplaſms.—It is one of the ingredients *decocti ad nephriticos.*

" Refrigerat & humectat parum, emollit, maturat, extergit, ſubaſtringit. " Uſus ejus internus licet rarus ſit, tamen prodeſt in pectoris mucilagine, & " hinc in tuſſi, in renibus extergendis, & hinc in ſtranguria & calculo. " Extrinſecus crebrior ejus eſt uſus, iſque in tumoribus, eryſipelate, ambuſtis, " vulneribus; & ut plurimum adhibetur in clyſteribus & cataplaſmatibus. " *Præp.* Aqua ſtillatitia, ex integra herba menſe Julio collecta." *Schrod.* 642. Aquoſum molle emolliens, & nephriticum vegetabile eſt, in *Boerh.* Lib. de M. M.

It is, 1. of an herbaceous watery taſte, and no ſmell. " Eſt guſtu nitroſo, " blites, & ſuperficie abſtergente." *J. B.* ii. 977. " Multiuſus tota ad ene- " mata, & balnea abſterſioni accommoda, guſtu item ut ſuperficie abſtergente " nitroſo, bliteo, cui admodum ſimilis." *Lob. Adv.* 98.—2. Summitatum thea is very tranſparent, of a canary colour, herbaceous taſte, almoſt like that of plain barley water, and earthy ſmell. It reddened a little a ſolution of

turnſole. Solutio vitrioli turned it a little muddy, and precipitated a ſmall quantity of an aſh-coloured mucous ſediment: oleum tartari gave it a more citron colour, diminiſhed its pellucidity, and made it ſomewhat fetid when rubbed between the fingers. Hence it is not aſtringent, but ſomewhat ammoniacal.—3. " Salem nitro ſulphureum præbet hæc planta, non ſecus quam " borrago & bugloſſum. *D. Boyle* (de Utilitate Phil. Nat.) Quod ſale nitroſo " abundet, vis ejus deterſoria oſtendit." *R. H.* " By a chymical analyſis it " yields a good deal of oil, much fixed ſalt, and much earth, both acrid and " acid liquors, no volatile ſalt, but ſome urinous ſpirit." *T. Hiſt.* p. 292.—4. It is much commended in obſtructions of urine, both inwardly and outwardly applied. " Succi ʒiij. hauſtæ, urinam mire provocant ſuppreſſam." *Matth.* 782. who ſays it cures green wounds in three days, ſo as to need no other application. " Applicata pubi, iſchuriæ infantum medetur." *Herman. Cynoſ.* p. 546. " Saporis & naturæ eſt nitroſi. Eſt aperitiva, inſigniter diu- " retica, lithontriptica, & alvum laxans." *Nucl. Belg.* 221.

N. B. " Floſculi conferti circa caulem ex foliorum alis, floccos coccinei " ſerici imitantur primulum e nodulo emicantes: poſt ſe ſtamina oſtendunt " obſcure, ex albo purpuraſcentibus apiculis, involuta, quæ ſi ſtilo evol- " vere coneris, ſubſultim, excuſſo pulvere cum impetu, ſpectaculo jucundo, " ſe expandunt repanda, in medio ſeminis rudimentum circundantia." *J. B.* ii. 976.

PERSICARIA.

SECT. I.

Perſicaria, Perſicaria acris, Hydropiper. *offic.* Perſicaria, urens; ſeu Hydropiper. *B. P.* 101. *T.* 509. Perſicaria acris, ſive Hydropiper. *J. B.* iii. 780. *H. Ox.* ii. 589. Perſicaria vulgaris, acris, ſive minor. *Park.* 856. Perſicaria vulgaris, acris; ſive Hydropiper. *J. B. R. H.* 182. Perſicaria vulgaris, acris; ſeu hydropiper. *J. B. R. Syn.* 144. Hydropiperi. *Dod.* 607. Hydropiper. *Ger.* 445. Perſicaria, florum ſtaminibus ſenis, ſtylo bifido. *H. Cliff.* 42. Hot Arſmart, Water-pepper, or Lake-weed.

It grows by rivulets, ditches, and other watery places, flowering in July. The herb is uſed. " Hydropiperi apud aquas maxime ſtagnantes, leniterve " fluentes gignitur. Caulem edit geniculatum ac ſolidum, circa quem alarum " ſunt concavitates, ac folia minthæ ſimilia, ſed majora, delicatiora, can- " didioraque, guſtu acri a piperis modo, non tamen aromatica. Fructum " gerit in ſurculis parvis, prope folia erumpentem, & racematim cohærentem, " qui et ipſe acris eſt. Radicem habet parvam inutilem." *Dioſc.* l. 2. c. 191. p. 155. If this be our plant, it is not very accurately deſcribed. *Etymon patet.*

SECT. II.

It agrees much with burnet-ſaxifrage in virtues, being an acrid detergent diuretic; is called lithontriptic; and commended internally in the ſtone, dropſy,

ſy, ſcurvy, &c. and outwardly for tumors and ulcers. It is an ingredient in the aqua petroſelini compoſita; but is little uſed.

" *Offic.* Folia calfaciunt & ſiccant. *Uſus præcip.* extrinſecus in vulneribus, " tumoribus induratis, ulceribus inveteratis, (in cataplaſm.) N. Paracelſus in " hydropiperis deſcriptione admodum prolixus eſt. Sunt qui hac herba ad " tranſplantationem morborum, præſertim incantatione introductorum, utun- " tur." *Schrod.* 645.

1. It is of a hot biting taſte, and no ſmell. " Sapor plantæ acris & " mordax." *R. H.* " Sapor acris & urens." *Nucl. Belg.* 224. " Borage is " of a very acrid and burning taſte, and reddens (vivement) the blue paper. " It is full of acid, ſulphur, and earth. For by a chymical analyſis, it gives " much acid, ſulphur, and earth; and a little volatile ſalt. Arſmart is very " deterſive and vulnerary; and uſed in clyſters for the dyſentery and teneſ- " mus." *T. Hiſt.* p. 219. Acre aromaticum, & alcaleſcens eſt in *Boerh.* Lib. de M. M. Dried its acrimony eſcapes off.—2. " Aqua hujus ſtillatitia efficax " eſt ad comminuendum calculum etiam veſicæ experimento cujuſdam nobilis " noſtratis, qui quotannis, in uſum pauperum, magnam ejus quantitatem " diſtillare ſolebat." *D. Boyle* de Utilitate Phil. Nat. part ii. p. 65. *R. H.* But neither plant nor water have place in the London Pharmacopœia. Vide *Helmont* de Magnetica Vuln. cur. § 29. p. 708.

PILOSELLA.

SECT. I.

Piloſella, Auricula muris. *offic.* Piloſella major, repens, hirſuta. *B. P.* 262. Piloſella major. *Dod.* 67. Piloſella majori flore, ſive vulgaris, repens. *J. B.* ii. 1039. Piloſella repens. *Ger.* 638. *R. H.* 243. *Syn.* 170. Piloſella minor, vulgaris, repens. *Park.* 689. Piloſella monoclonos, repens, vulgaris, minor. *H. Ox.* iii. 77. Hieracium, foliis integerrimis, ovatis; caule repente, ſcapo unifloro. *H. Cliff.* 388. Dens leonis, qui Piloſella officinarum. *T.* 469. Common creeping Mouſe-ear.

It is common enough in commons and dry paſtures, flowering in June and July. The herb is uſed. " Piloſella, a copioſis pilis quibus veſtitur " nomen ſortita eſt, quam aliqui ad myoſotidem, alii ad holoſtium referunt. " Sunt qui intybi minimam ſpeciem faciant." *B. P.*

SECT. II.

It is an attenuating diuretic, and deobſtruent; called aſtringent and vulnerary: and is commended internally in fluxes, hæmorrhages, hernias, heat of urine, conſumption, jaundice, &c. and externally, for ſore mouths, ulcers, herpes miliaris *or* ſhingles, &c. Cum dente leonis convenit.

" *Offic.* Integra planta, ſeu folia, calfacit & ſiccat. 2. Adſtringit, abſtergit, " conſtipat, ſternutatoria eſt, & vulneraria (intus & extus adhibita), dyſen- " teriam, alvi uterique fluxus ſiſtit, bilem æſtuantem ſedat & incraſſat, her- " nias (præcipue infantum) curat. Extrinſecus medetur ulceribus oris (in " collu-

" collutionibus) hæmorrhagiam narium ſedat (pulvis nari inditus). *Præp.* " aqua ex integra planta diſtillata." *Schrod.* 542.

It is of a bitter taſte, ſomewhat rough, like dens leonis (of which it is a ſpecies), or of hieracium; and has no peculiar ſmell. " Surculi amarum lac " fundunt. Folia ſunt ſapore exſiccante." *J. B. R. H.* " Saporis eſt auſteri " & ſubamari." *Nucl. Belg.* 227. " This plant is very bitter, and reddens a " little the blue paper. By a chymical analyſis, beſides ſeveral acid liquors, " it yields much oil and earth, a little urinous ſpirit, no volatile ſalt, which " ſhews that it contains a ſalt like alum, enveloped in much ſulphur, and " mixed with a little ſal ammoniac: thus it is vulnerary and deterſive. " Tragus ſays the infuſion is good for the jaundice, and to prevent the drop- " ſy. Tabernemontanus, that the plant is a ſpecific for ruptures: the extract " is uſed for inward ulcers, and the phthiſis. Pena and Lobel think the " plant admirable for the ſtone." *T. Hiſt.* p. 516. How he finds here an aluminous ſalt, I ſee not: but its being a deterſive vulnerary is better founded. " Piloſella, auricula muris . . . univerſa aſtrictoriæ facultatis, quadam tenuitate " calida mixtæ, cujus ea eſt vis, ut ſucco decoctove acies chalybeæ candentes " ſæpius merſæ, quamlibet duritiem lapideam, ferreamve præcidant, & de- " moliantur, nec tamen retundantur, aut hebeteſcant. Vi etiam eſt præſen- " tiſſima ad calculum." *Lob. Adv.* p. 200.

PIMPINELLA.

SECT. I.

Pimpinella, Sanguiſorba, Pimpinella ſanguiſorba. *offic.* Pimpinella, ſanguiſorba, minor, hirſuta. *B. P.* 160. *T.* 157. *H. Ox.* iii. 263. Pimpinella ſanguiſorba. *Dod.* 105. Pimpinella hortenſis. *Ger.* 1045. Pimpinella vulgaris, ſive minor. *Park.* 582. *R. H.* 401. Sanguiſorba minor. *J. B.* iii. 2. 115. *R. Syn.* 203. Poterium inerme. *H. Cliff.* 446. Common Burnet.

It grows in hilly paſtures, eſpecially if chalky, plentifully in England, flowering in June. The herb or leaves and flowering tops are uſed. " San- " guiſorba vel ſorbaſtrella, quod ſanguineos fluxus ſiſtat: quæ πιμπινελε " myrepſo, & quibuſdam ſideritis ſecunda Dioſcor. cenſetur. An ſyſſitieteris " *Plinii.*" *B. P.* 159. Vide *Dioſcor.* l. 4. c. 34. p. 256. et *Plin.* l. 24. c. 17. p. 624. There is ſome probability of its being the ſideritis altera Dioſcoridis; but none for its being the ſyſſitieteris Plinii, (to which he gives many names, but no deſcription) if it be not quoniam vino mire conveniat, and is thence called Dionyſionymphas.

SECT. II.

It is a ſubaſtringent vulnerary; called cordial, and alexipharmic; and in fluxes, hæmorrhages, catarrhs, conſumptions, to prevent abortion, &c. it is commended: it is alſo ſaid to have cured the hydrophobia.

" *Offic.* Herba cum floribus, radix. Refrigerat moderate, ſiccat, aſtringit; " vulneraria ac pulmonica eſt, ſaporis grati. *Uſus præcip.* in catarrhoſis affec-

" tibus

" tibus pulmonum, phthiſi ex eroſione, in morbis malignis, in profluviis alvi, " hæmorrhoidum; præcavet abortum extrinſecus in hæmorrhagia quacunque " utiliter adhibetur. *Præp.* 1. Aqua ſtillat. ex integra planta cum radice & " floribus collecta Junio. 2. Syrupus de ſucco. 3. Conſerva, ex floribus." *Schrod.* 672. Inter acida auſtera eſt in *B.* Lib. de M. M.

1. It is of a mild ſubaſtringent and not diſagreeable taſte, and ſoft melony-ſmell. Or rather it ſmells and taſtes of cucumbers, with a little of the rankneſs of the burnet-ſaxifrage; at leaſt in October. " Radix eſt cum ama- " rore aliquo adſtringens; folia melonis odore, ſaporeque, cum adſtrictione." *J. B. R. H.* " Odoris eſt ſatis grati, ſaporis herbaceo-ſalſi, ſubauſteri & ſatis " grati." *Nucl. Belg.* 228. " It is of an herbaceous ſaltiſh taſte, and reddens " very little the blue paper. Analyſed it gives ſeveral acid liquors, much " volatile ſalt, much oil, and much earth. So it is not ſurpriſing that it " ſhould be deterſive, vulnerary, diaphoretic, diuretic, and proper to purify " the blood and reſtore the tone of the parts." *T. H.* p. 517.—2. Infuſed green in wine or ale, it gives it ſoon an agreeable flavour; but not when dried or bruiſed. " Habet, vero ſuperficie tenus, quandam leviter odoratam & " temperatam qualitatem, quam in vinum injecta deponit: hæc nec aridæ " herbæ adeſt, nec ſucco aut decocto communicatur. In acetariis ad hilari- " tatem facere creditur, veluti & in vinum injecta, cui gratiam quandam " inter bibendum conciliat." *Dod.* 105. It is to this quality its cordial virtues are attributed." " Virens vino injicitur ad cor exhilarandum, eique " gratiam conciliat, communicato odore & ſapore aromatico, melonis æmulo. " Præſervat etiam a peſte & morbis contagioſis." *R. H.*

" Henrici II. Galliarum regis, venator bona fide aſſeveravit pimpinellam " ad præcavendam hydrophobiam tantam vim obtinere, ut quicunque eam " aliquot diluculis, vel in acetariis, vel alio quovis modo apparatam come- " derit, nihil inde incommodi ſentire poſſit." E *Palmario* de morſu canis rabidi. *J. B.* iii. 2. 120. who employs near five pages on this plant, more than one page being on its virtues. " Panchovius refert regem Chabam, " finito quodam prælio 15000 vulneratos uſu pimpinellæ reſtituiſſe." *R. H.* 402. *Vide ſupra* pimpinella faxifraga, which is often confounded with this plant. And hence it is that it is commended in the ſtone and gravel, by Miller, James, &c. " An herba aſtringens utilis eſſe poſſit in arena & cal- " culo, ut nonnulli volunt, lectori conſiderandum proponimus." *R. H.* " Sanguiſorbæ radix reſpondet. Caryophyllatæ hujus radicis uſu, hydro- " phobia fuit curata." *Herman. Cynoſ.* p. 171.—3. Herbæ thea is but little tinctured, and taſtes and ſmells like weak barley-water. It reddens, but weakly, a ſolution of turnſole; oleum tartari makes it yellow, but not fetid; and with a ſolution of vitriol it becomes opake, of a bluiſh-green-black.

PLANTAGO.

SECT. I.

Plantago, Plantago latifolia. *offic.* Plantago, latifolia, ſinuata. *B. P.* 189. *T.* 126. Plantago major. *Dod.* 107. Plantago major folio glabro, non laci-

niato ut plurimum. *J. B.* iii. 502. Plantago latifolia. *Ger.* 419. Plantago latifolia, vulgaris. *Park.* 493. *H. Ox.* iii. 258. *R. H.* 876. *Syn.* 314. Plantago ſcapo ſpicato, foliis ovatis. *Fl. Lap.* 34. Plantago, foliis ovatis. *H. Cliff.* 36. Great Plantain or Way-bread.

It grows every where by the way ſide, &c. flowering in June. The leaves, ſeed, and root are uſed, or the whole plant. " Plantago, ἀργογλωσσον, Dioſ- " coridi, i. e. lingua agnina dicitur: aliis πολυνευρος, multinervia, & ἑπτα- " πλευρος, ſeptinervia, Latinis plantago, a planta ducto nomine." *B. P.* 189. " Plantago a latitudine foliorum, plantam pedis æmulantium, dicta exiſti- " matur." *R. H.*

" Plantago duum eſt generum, minor una, major altera. Minor quidem " foliis prædita eſt anguſtioribus, minoribus, mollioribus, lævioribus & te- " nuioribus; cauliculis vero anguloſis ad terram inclinatis; floribus autem " pallidis, ac ſemine ſummis caulibus emicante. At major & amplior latior- " que eſt, & latifolia, oleracea (vel in oleris uſum apta). Caulis huic angu- " loſus, ſubruber, cubiti altitudine, a medio ad verticem tenui ſemine circun- " datus. Radices ſubjacent teneræ, hirſutæ, candidæ, digitali craſſitudine. " Naſcitur in paludibus, ſepibus & locis religinoſis. Major porro efficacior " eſt." *Dioſcorid.* l. 2. c. 153. p. 140. It is ϛελεφϑερος & ἀργογλωσσον, in *Theoph.* l. 7. c. 10. p. 842. Vide *Bodæum.* p. 848. & *Plin.* l. 25. c. 8. p. 637. I find it not in *Hippocrates.* Neither boves nor equi eat it, according to *Lin.* Pan Swecus. Amæn. Acad. ii. p. 240.

SECT. II.

It is an attenuating, diuretic, and ſubaſtringent vulnerary; called hepatic: and is commended internally for fluxes, hæmorrhages, internal ulcers, conſumptions, &c. and outwardly for wounds and ulcers of all kinds. Yet it is little uſed here, except in the ſyrupus e ſymphyto, and emplaſtrum defenſivum.

Offic. " Semen, folia, radix. Refrigerant & ſiccant 2. abſtergunt, in- " craſſant, epatica ſunt ac vulneraria. *Uſus præcipui* in fluxionibus cujuſcun- " que generis. e. g. alvi, expuitione ſanguinolenta, gonorrhæa, mictione in- " voluntaria, in menſium profluvio, in febribus, & extrinſecus in mundifi- " candis, conſolidandiſque vulneribus, ac ulceribus inveteratis. *Præp.* 1. Suc- " cus inſpiſſatus, ex foliis. 2. Aqua ſtillat. ex herba integra. 3. Syrupus de " ſucco." *Schrod.* 650. " Succus plantaginis vel merus, vel cum ſucco li- " monum mixtus, inſigne eſt diureticum." *D. Needham. R. H.*

1. It is of an herbaceous ſomewhat bitter taſte, and no ſmell. " Folia " ſunt ſapore, ut mihi videtur, aſpero, cum aliqua acrimonia & amaritudine." *J. B.* " Saporis primo herbacei, deinde ſubauſteri." *Nucl. Belg.* 230. " Plan- " tain leaves are bitter, aſtringent, and redden a little the blue paper: the " roots redden it more, and are aſtringent only.—This plant is vulnerary, " reſolutive and febrifuge. Tragus values it highly in conſumptions. In " the country they give ſucci ℥ij. to ℥iv. in the beginning of the fits, in agues. " Extracti ʒij. or ſeminis ʒi. ſtop fluxes and all kind of hæmorrhages. The " ptiſan and diſtilled water have the ſame virtues: they are ordered in the dy-

" ſentery, hæmoptoe, fluxu hæmorrhoidum aut menſium nimio, fluore albo, " hæmorrhages: in fine, plantain is uſed in every vulnerary and deterſive " potion." *T. Hiſt.* p. 222. who adds that " collyriums and gargariſms are " made of it; and it is an ingredient in Julian Paulmer's pulv. ad rabiem." —2. Foliorum thea is very tranſparent, little tinctured, of a *new* brandy colour, an herbaceous pretty bitter taſte, and graſſy ſmell. It only dilutes ſyr. viol. and reddens but little ſol. heliotropii. With ol. tartari it becomes yellow, but not of a urinous ſmell. Solutio vitrioli turns it firſt green, then dark and opake, precipitating little and ſlowly. Hence it is ſubaſtringent only at moſt; and deterſive.—3. Few plants ſeem to have been more uſed by the ancients than plantain. Dioſcorides commends it in inflammations, puſtules, burnings, bleedings, bites of dogs, carbuncles, ſcrophulæ, and other tumors; for all foul, malignant, and ſpreading though leprous ulcers, fiſtulæ; for ophthalmiæ, otalgies, tooth-achs, hyſteric fits, dyſenteries, &c. outwardly applied: and internally for fluxes, hæmorrhages, dyſentery, leucophlegmatia, epilepſy, aſthma, hæmoptoe, phthiſis, ulcers in the reins and bladder, &c. and concludes thus: " Cæterum ferunt ternas radices, cum vini cya- " this iij. & aquæ pari modo, tertianis febribus; itemque quaternas quarta- " nis auxiliari. Sunt & qui radice vinculo e collo ſuſpenſa, utantur ad " ſtrumas diſcutiendas." *Dioſcor.* l. c.

This calls to mind *G. W. Wedelius* his amuletum antipeſtilentiale, which he wore fifty years, and thought a preſervative againſt all infection. It was compoſed of the rad. colchici, & plantaginis, & Fl. lavendulæ. You have an account of it in his ***Experimentum curioſum de colcho veneno, & alexipharmaco ſimplici & compoſito.*** *Jenæ* 1718. in 4to. See *Geoff.* iii. 350. who himſelf ſeems to be a believer in the virtue of this amulet, although he quotes an inſtance where it did not ſucceed from Jac. Wolfius and Rivinus's judicious opinion concerning it. " D. Aug. Quir. Rivinus (ſays he) tractatu de peſte Lipſienſi, " an. 1680. de hoc amuleto ſibi ipſi communicato mentionem facit tanquam " certiſſimo contra peſtem: (here appears to be deſigned ambiguity) & " poſtea ſuam de his amuletis mentem aperit: & non eſſe alium eorum uſum, " niſi quod his confiſi præſidiis, plebeii præſertim magnanimi reddantur, " minuſque contagium perhorreſcant, exiſtimat. Omnes autem norunt quid " valeat terror, quantum peſtilentiæ vires adaugeat." Thus *Geoffroy.* This is the beſt apology alſo for ſuch fraudulent impoſitions.

Galen gives it moſt of *Dioſcorides*'s virtues, and commends it alſo in obſtructions of the liver and kidnies. Vide *Simpl.* l. 6. p. 58. *G.* Nor have the moderns been ſparing of their praiſes of plantain. Thus an electuary made of freſh comfrey roots, juice of plantain, and ſugar, " adverſus vomitum & " expuitionem ſanguinis, nullum certius & præſentius remedium." *Boyle* de Util. Phil. Nat. part 2. p. 150. *R.H.* 879. From which our ſyrupus e ſymphyto differs not much. " Mulierculæ Gallicæ, toto geſtationis tempore, " ad abortum præcavendum, ſingulis fere diebus, ſumunt ſem. plantaginis " ʒß in juſculo, aut ovo, & non ſine fructu." *River. Prax.* p. 479. *R. H.* l. c. *B. Hiſt. Plant.* dicta p. 566. " Hæc planta habet virtutem adſtringen- " tem ſine ulla tarditate manifeſta & acerbitate." *Stupide!*—

POLIUM.

SECT. I.

Polium. Polium montanum. *offic.* Polium montanum luteum. *B. P.* 220. *T.* 206. *Tab. Ic.* 364. *Ger.* 653. *R. H.* 525. *H. Ox.* iii. 355. Polium. *Dod.* 283. Polium montanum tertium. *Cluſ. H.* 361. Polium montanum vulgare. *Park.* 24. Teucrium, foliis oblongis, obtuſis, crenatis, ſeſſilibus, ſpicis ſubrotundis, pedunculatis. *H. Cliff.* 302. Yellow Poley-mountain.

It grows in Spain, South-France, &c. flowering in the ſpring. "Florebat "vero natali loco martio menſe, apud Belgas ſerius." *Cluſ. H.* 362. "Junio "& Julio floret." *Dale.* p. 144. The herb, or leaves and tops are uſed.

There are two polia in Dioſcorides, viz. (α) polium montanum, for which ſome take polium montanum album. *B. P.* others polium montanum luteum. *B. P.* otherwiſe polium maritimum erectum Monſpeliacum. *B. P.* &c. (β) polium alterum fruticoſius: which ſome think the polium lavendulæ folio *B. P.* or his firſt polium montanum. "Volunt officinæ non quodvis polium "ſed montanum i Dioſcoridis, cujus apud Bauhinum quatuor varietates, "earundem, ut puto, virium." *Hoffman.* p. 426. And any of them may be taken for it; it being uſed only here in the mithridatium Damocratis, and theriaca Andromachi. Schroder has no polium, but the abrotonum fœmina, foliis teretibus. *B. P.* which is the polium Theophraſti, & Dioſcoridis, & Arabum, vermiculato folio. *Col.* i. 54. The *old* London diſpenſatory has alſo two polia, viz. polium montanum, i. e. polium maritimum erectum monſpeliacum. *B. P.* and polium creticum, i. e. polium anguſtifolium creticum, *B. P.* "Polium creticum *offic.* cum polio albo (that is polium montanum album. "*B. P.*) viribus convenit, quocum in officinis pharmacopolarum confunditur, "& pro eo venditur." *Dale* 145. "Polium creticum, *offic.* It agrees in "virtues with the polium montanum, for which it is often ſold in the ſhops." *James Diſp.* p. 408. *Cujus contrarium eſt verum.*

"The candy-poley is much of the nature of the polium montanum, but is "rather ſtronger; and, if it could be procured, is what ought to be uſed "when polium creticum is preſcribed. But as it is hardly to be met with, "the other may be uſed without much detriment to any compoſition." *Miller Bot.* 353. *Dale*, edit. 2. p. 235. The polij ſummitates, are the tops of the polium anguſtifolium creticum. *B. P.* or the polium maritim. erect. Monſpeliacum; according to the *new* London diſpenſatory, which might well have ſaved or enlarged the alternative. *N. B.* In the mithridatium of *this accurate* diſpenſatory polium ſimply is ordered; but in the theriaca folia polii. Pharm. Edinb. (editionis etiam 1744) for the mithridatium orders polium montanum; for the theriaca polium creticum, which is not among the ſimples. "Sic "dictum propter canitiem, quæ in capitulis, ſecundum Dioſcoridem, at ſe-"cundum Plinium in foliis apparet." *B. P.* Vide *Dioſcor.* l. 3. c. 124. p. 225. The polium montanum luteum *B. P.* is the only polium Cod. Med. Vide *S. Pauli Quad. Bot.* p. 117.

SECT.

SECT. II.

It is an attenuating diaphoretic; called alexipharmac, cephalic, and uterine; and is commended in the palſy, epilepſy, madneſs, female obſtructions, jaundice, dropſy, &c. and may be given to ʒj.

" Polium alexipharmacis olim dicatum, apud Galenum (8. ſimpl.) eſt " majus & minus, quorum illud eſt infra hoc. Utrumque eſt amarum & " acre, calidum in 2. completo, ſiccum in tertio." *Hoffm.* 426. " Cum acre " ſit & amarum, urinam & menſes ciet, hydropicos & ictericos juvat, vene- " natis morſibus auxiliatur." *R. H.* " Sudores, menſes & urinam movet; " eſt cephalicum, aperitivum, vulnerarium, ſtomachicum, & anthelmintı- " cum." *Nucl. Belg.* 232. " Polium celebre eſt in uteri vitiis ab obſtructio- " nibus. Sylvius (Prax. Med. l. 2. c. 20. § 148.) inter celebratiſſima medi- " camenta antepileptica, poſt rutam, polio montano ſecundum locum tribuit: " veteres vero vim contra maniam & noctambulationem." *Herman. Cynoſ.* p. 477.

It is of an aromatic bitter taſte, and pretty fragrant ſmell. " Saporis " amari aromatici, odoris grati." *Nucl. Belg.* 232.

POLYGONUM.

SECT. I.

Polygonum, Polygonum mas, Centinodium. *offic.* Polygonum latifolium. *B. P.* 281. *T.* 510. *H. Ox.* ii. 591. Polygonum mas. *Dod.* 113. Polygonum mas vulgare. *Ger.* 565. *R. H.* 184. *Syn.* 146. Polygonum mas, vulgare, majus. *Park.* 443. Polygonum ſive Centmodia. *J. B.* iii. 374. Polygonum. *Cæſ.* 168. *H. Cliff.* 150. Common Knotgraſs.

It grows every where by the way ſides, &c. flowering in July, and all ſummer. The herb is uſed.

" Polygonon Dioſcoride a copioſis geniculis, quibus caules ci guntur, dic- " tum. Plinio (l. 27. c. 12.) Polyganon Græci vocant, quam nos ſanguina- " riam." *B. P.* 280. It is pretty well deſcribed by *Dioſcorides* (l. 4. c. 4. p. 247.) by the name πολυγονον ἀρρεν.

SECT. II.

It is an antiſeptic and ſubaſtringent vulnerary; and is commended internally in fluxes and hæmorrhages, particularly in vomiting of blood; and outwardly for inflammations, wounds and ulcers. It is uſed in the emplaſtrum defenſivum.

" Refrigerat 2. (aliis in princ. 3.) ſiccat, aſtringit, vulneraria eſt. *Uſus præcip.* " in ſiſtendis fluxibus quibuſcunque, diarrhœa, dyſenteria, fluxu uterino, " vomitu, hæmorrhagia narium. Extrinſecus prodeſt vulneribus, ulceribus, " inflammationibus oculorum, mammæ tumoribus, febri tertianæ (carpis

" impoſ.) *Præpar.* aqua ſtillat. ex herba collecta in principio Auguſti." *Schrod.* 652.

1. It is of an herbaceous, ſubviſcid and ſomewhat rough taſte, without ſmell. " Radix ſapore adſtringente." *R. H.* " Folia guſtu viſcido." *J. B.* " Saporis eſt herbacei & ſubauſteri." *Nucl. Belg.* 233. " This plant " has an herbaceous glutinous (gluant) taſte, and is a little acid; it reddens " much the blue paper. By a chymical analyſis it gives much acid, earth " and oil, little volatile ſalt, and little fixed very-lixivial ſalt. It is very vul- " nerary and aſtringent. The juice, ptiſan, or infuſion in wine, is given for " all ſorts of hæmorrhages." *T. Hiſt.* p. 351. But—2. Becauſe Dioſcorides ſays, " Vis epoti ſucci adſtringere & refrigerare: prodeſt hæmoptoicis, alvi fluxio- " nibus, cholera & ſtranguria laborantibus: nam evidenter urinas ciet. (l. c.) His virtues of it are declared inconſiſtent, as if no aſtringent could prove diuretic: Vide *S. Pauli Quad. Bot.* p. 439. Is it aſtringent? Herbæ thea is of a greeniſh whey-colour, of little taſte, not aſtringent. With ſol. vitrioli it became greeniſh-brown and opake: with ol. tartari it ſmelled urinous. In five days its ſcent was ſomewhat ſouriſh; but in about two weeks afterwards it ſtank abominably.—3. It is ſaid to be hurtful to ſheep. " Carolus Stepha- " nus valde nocuam herbam ovibus, ſi ea veſcantur, afferit. Ait enim totum " earum ventrem inflari, eaſque humorem ſubtilem & valde fœtidum excer- " nere." *J. B.* iii. 376.

" Camerarius in nobiliſſimo quodam viro hujus ſuccum pauco vino ſtyptico " propinatum, contra vomitum ſanguineum, aliis remediis fruſtra adhibitis, " maxime profuiſſe expertus eſt. An urinam cieat, aut calculum renum pel- " lat dubitatur. Dioſcoride id affirmante, Galeno non conſentiente." *R. H.* 185. According to *Lin.* (Pan. Sueicus) all the five pecora commonly eat it. Amæn. Acad. ii. p. 246.

PRIMULA VERIS.

SECT. I.

Primula veris, Paralyſis, herba Paralyſis. *offic.* Primula veris, odorata, flore luteo, ſimplici. *J. B.* iii. 495. *T.* 124. P. V. major, floribus luteis, odoratis. *Dod.* 147. P. V. flavo flore, elatior. *Cluſ. H.* 301. P. V. major. *Ger.* 780. *R. H.* 1081. *Syn.* 284. Paralyſis vulgaris, pratenſis; flore flavo, ſimplici odorato. *Park.* par. 244. Verbaſculum pratenſe odoratum. *B. P.* 241. *H. Ox.* ii. 554. Primula foliis denticulatis, rugoſis; limbo corollarum concavo. *H. Cliff.* 51. Common Cowſlip or Paigle.

It grows on paſture grounds, flowering in April. The flowers, leaves, and roots are uſed. In the *old* London Pharmacopœia, which ours hitherto follows, there is a paralyſis very diſtinct from the primula veris. The paralyſis being the plant above deſigned, and the primula veris, the primula veris floribus ex ſingularibus (pediculis) pallidis, majoribus, ſimplicibus. *J. B.* iii. 497. (*T.* 125.) Primula veris vulgaris, *Park.* 535. *R. H.* 1080. *Syn.* 284. Verbaſculum

culum ſylvaticum, majus, ſingulari flore. *B. P.* 241. or the common primroſe. Which indeed is more common here: but the flowers are not ſo odoriferous; otherwiſe they do not differ; and can ſcarce be called different ſpecies. According to the ſaid London Diſpenſatory, paralyſeos herba & flores, primulæ veris herba & radix, are uſed: according to the Edinburgh Diſpenſatory, paralyſeos flores & primulæ veris herba & radix: though the herba (rather folia) and radix of both are equally good, and no way diſtinguiſhable. I make the primula veris and paralyſis ſynonyma, and chooſe the moſt odoriferous, as Hoffman directs, and Schroder, Ph. Leid. and many others do. Paralyſis flores, verbaſculi pratenſis odorati. *B. P.* "Primulæ veris majoris, *Raii.*" *Ph. Lond. Nov.* (p. 15.) which has thrown out the other.

"Primulæ veris quod primo vere floreant. *Dioſcorid.* l. 4. c. 104. φλομιδες, "& *Plinii*, l. 25. c. 10. Phlomides cenſentur. Aliis vero *Plinii*, l. 25. c. 4. "& l. 26. c. 11. Dodecatheon, cui ſunt folia ſeptem, lactucis ſimillima, a "lutea radice exeuntia. Verum apud Plinium, l. 25. c. 10. Alterum genus "aliſmatis in ſylvis, nigrius, majoribus foliis videtur." *B. P.*

SECT. II.

It is deterſive and aromatic, like the lilium convallium; called cephalic and anodyne; and commended in the palſy, apoplexy, epilepſy, want of ſleep, &c. This may be uſed like tea. The conſerva florum was left out of the Pharm. Edinb. 1744. There is a ſyr. florum paralyſis in the New Lond. Diſp. Folia & radix internally uſed are reckoned vulnerary, deobſtruent, and diuretic; and externally, anodyne and diſcutient.

"*Offic.* Flores ac folia. Calfacit leniter, ſiccat fortius; ſaporis eſt ſubacris "& ſubauſteri; ſubaſtringit; anodyna eſt. *Uſus præcip.* in affectibus capitis, "apoplexia, paralyſi; in articulorum doloribus. Extrinſecus in arthritide "ac tumoribus, qui ictus venenatorum animalium ſubſequuntur. N. acetum "radicibus impregnatum, ac loco errhini in nares attractum, odontalgiam "mirabiliter ſedat. *Præpar.* 1. Aqua ex integra herba, (caule, foliis ac flori-"bus. 2. Conſerva ex floribus." *Schrod.* 655. Folia aperientibus deterſivis ad ulcus pulmonum annumerantur in *Boerh. Lib. de M. M.*

1. It is of an herbaceous, ſoft, bitteriſh, but not diſagreeable taſte, and ſomewhat odoriferous: the flowers ſmell ſweeter than the root or leaves. "Radix eſt ſapore ſubaſtringente, odore ſuavi, aromatico." *J. B.* "Radicis "ſapor ſubadſtringens; floris odor validus & non ingratus." *R. H.* "Tota "ſaporis eſt herbacei, flores odoris grati." *Nucl. Belg.* 235. It is uſed as a pot-herb, ſallet, &c. in England. "Primularum folia & flores guſtu non "ingrato, in olere, placentis & acetariis ſumuntur, ſuntque admodum amica "& utilia capiti & nervoſo generi. Adhibentur in apoplexia, paralyſi & arti-"culorum doloribus." *R. H.* 1082.—2. The flowers analyſed give much acid, little urinous ſpirit, no volatile ſalt, a conſiderable quantity (*aſſez*) of oil and earth. They contain a ſal volatile oleoſum aromaticum, pretty temperate; are aperitive, &c. *T. Hiſt.* p. 520. *An recte?*—3. This plant is much commended in diſeaſes of the head and nerves, &c. and may be uſed any way. "Florum "ſuccus maculas rugaſque faciei, & alia cutis vitia, mirifice detergit. Aqua

"florum,

" florum, & conſerva, nec minus ſyrupus, anodyna ſunt & hypnotica. " Infuſa, decocta, & extracta primularum veris cujuſcunque generis, ano- " dyna & hypnotica ſunt benigna & innoxia, iis qui tenerioris ſunt ſeu æta- " tis ſeu conſtitutionis apprime idonea: *D. T. Robinſon.* Decoctum radicum. " P. V. vulgaris, in Zythogalo, aliove idoneo vehiculo ſumptum, ſingulare " eſt & præſentiſſimum remedium ad vertiginem: *D. Hulſe.* Succus folio- " rum & florum expreſſus, cum pari quantitate lactis vaccæ rubræ, frequenter " hauſtus, cephalalgiam inveteratam perfecte curavit, cum alia medicamenta " nequicquam tentata fuiſſent: *Idem.* Paralyſin lateris ſiniſtri curavit *Tho.* " *Bartholinus* ſpiritu frumenti, cui herba paralyſis incocta erat, ut ipſe refert." *Ephem. Germ. An.* 2. *Obſ.* 2. *R. H.* 1082.

" Flores ſunt ex illis ſuaveolentibus & vaporoſis, quæ blandum ſomnum " conciliant: eximiam præſtant virtutem in epilepſia & affectibus ſpaſmodi- " cis: non ſolum effrenatum, ſed & impotentem motum generis nervoſi cor- " rigunt, hinc valent ad paralyſim, apoplexiam, &c. Vi anodyna conducunt " ad rheumatiſmum, arthritidem, &c." *Nucl. Belg.* 235. " Flores virtute " traumatica quoque, æque ac folia gaudent. In balneis antiparalyticis, item " in cucuphis adhibentur. Radix commendatur in febribus, calculo renum, " herniis & lumbricis." *Boecler. in Herm. Cynoſ.* p. 596. Vide *Matth.* p. 802. *J. B.* iii. 496.

" Accipio vim ſiccatoriam in floribus, e quibus parata conſerva, non minus " efficax ſit in paralyſi, quam lilii convallium. Requiritur autem hic præci- " pue diligentia pharmacopœi, ut quam odoratiſſimos flores habeat. Tanta " enim illorum latitudo, ut quidam ſint prorſus inodori. Illorum aqua ſtilla- " titia, epilepſiæ etiam commoda eſt." *Hoffman.* p. 432.

PULEGIUM. Vide p. 181.

ROSA.

SECT. I.

1. Roſa alba. *offic.* Roſa alba, vulgaris, major. *B. P.* 482. *T.* 637. Roſa alba. *Tab. Ic.* 1083. *Ger.* 1260. *R. H.* 1478. Roſa Anglica, alba. *Park. Par.* 412. Roſa candida plena, & ſemiplena, *J. B.* ii. 44. Roſa alba. *offic. Dale* 293. The common White-Roſe.

2. Roſa damaſcæna, Roſa pallida. *offic.* Roſa purpurea. *B. P.* 481. *T.* 637. Roſa rubello flore multiplicato, ſive pleno, incarnata vulgo. *J. B.* ii. 36. Roſa provincialis, major. *Tab. Ic.* 1084. Roſa provincialis, ſive damaſcæna. *Ger.* 1261. Roſa damaſcena. *Park. Par.* 413. *R. H.* 1468. Roſa pallida, *Lob. Adv.* 446. The Damaſk-Roſe.

3. Roſa rubra. *offic.* Roſa rubra, multiplex. *B. P.* 481. *T.* 637. Roſa rubra. *Ger.* 1260. *R. H.* 1468. Roſa Anglica rubra. *Park.* par. 412. Roſa rubra, flore valde pleno & ſemipleno. *J. B.* ii. 34. The Red-Roſe.

4. Roſa ſylveſtris, Cynoſbătus, Cynorrhodon. *offic.* Roſa ſylveſtris, vulgaris, flore odorato, incarnato. *B. P.* 483. *T.* 638. Roſa ſylveſtris. *Tab. Ic.* 1088. Roſa ſylveſtris alba, cum rubore, folio glabro. *J. B.* ii. 43. Fl. Lap. § 202.

Roſa canina, inodora. *Ger.* 1270. Roſa ſylveſtris inodora, ſive canina. *Park.* 1017. *R. H.* 1470. *Syn.* 454. The Common Briar, Dogs-roſe, or Hip-tree.

The laſt, and five or ſix more (ſpecies *an* varietates?) are indigenous. There are cultivated here many varieties. "Solus Clar. Boerhaavius in ſuo paradiſo, "circiter 70 diſtinctas varietates, e toto orbe conquiſitas, vivas colat. Nos "de roſarum catalogo parum ſolliciti ſumus, quamdiu ſpecies diſtinguere non "novimus; omnes enim quæ in hortis extant, plenæ & monſtroſæ ſunt, nec "ſpecies determinatæ in roſis ab ullo ſunt; nec poſſunt ab alio, quam qui in "locis natalibus examinet, deſcribi. Deſcriptiones datæ ſunt varietatum, "non ſpecierum notæ. Variant dein fructu non minus quam pyra & poma." *Hort. Cliff.* 191.

The capitula, cortex or periantheum, called alſo alabaſtri, antheræ, or yellow apices, capillamenta, folia ſeu petula, foliorum ungues, fructus, fructus lanugo, & ſemina or arilli, have been reckoned among the medicinal ſimples. Vide *R. H.* 1468. beſides the ſpongia cynoſbati, improperly called bedeguar. "Eſt enim bedeguar Arabum, cardui genus." *B. P. J. B.* &c. with the inſects it contains. But the fruit of the hip-tree. (our Pharm. adds ſpongiolæ) & floris folia, or petala of the reſt, are almoſt only uſed.

"Roſam vetuſtas ex ſanguine Veneris, & Turcæ ex ſudore Mahometis "ortam ſibi perſuadent, cujus nomine folia roſarum humi jacere non patiunt-"ur." *B. P.* Much has been written on roſes. There is a *Cynoſbatologia ad Normam Acad. Nat. Cur. adornata*, by *Ehrenfridus Hagendornius. Jenæ* 1681. in 8vo. Alſo, *Joan. Caroli Roſenbergii Rhodologia*, ſeu *Philoſophica-Medica generoſæ roſæ deſcriptio. Argentinæ* 1628. in 8vo. *Seguierius*, in *B. B.* calls him Joan. Jacobus Roſenbergius; and names ten or twelve authors more upon this ſubject.

SECT. II.

The flowers are aromatic, purgative, and ſubaſtringent; called cordial and analeptic; and commended internally wherever a mildly-exciting, corroborating, and gently evacuating medicine is wanted, as in many weakneſſes, lowneſs of ſpirits, want of appetite, fluxes, vomitings, conſumptions, &c. and externally for pains, inflammations, watchings, ſore eyes, throats, &c. The damaſk is moſt odoriferous and cathartic; the red more aſtringent; the white is little uſed. Hips are called cooling, pectoral, ſtomachic; but ſeem to be rather an aliment than medicament.

"*Offic.* Flores, anthera, i. e. capillamenta. *Vires.* Roſæ ut variant ge-"neribus, ita & qualitatibus.—Sunt enim qui non ſine cauſa roſas partim "calidas & acres, partim frigidas volunt, caloremque reſidere in ſuperficie, "a frigore ſcilicet eo expulſum, qui in marceſcentibus evaneſcit. In genere "tamen omnes refrigerant 1. ac aſtringunt; ſpiritus vitales animaleſque re-"creant ac roborant. Pallidæ ſeu incarnatæ laxant; rubæ ac albæ aſtringunt, "(alba lævius, rubra fortius). *Uſus præcip.* in fluxionibus, febribus, ſiti, "appetitu proſtrato, &c. Extrinſecus in vomitu, cephalalgia, vigiliis, do-"lore aurium, gingivarum ſedandis, recti inteſtini (cum vino coctæ & im-"poſitæ) in ulceribus & inflammationibus oris, faucium, oculorum. An-

"thera

" theræ exiccatæ immiſcentur dentifriciis ad gingivarum aſtrictionem, fluxio-
" numque exſiccationem." *Schrod.* 664. Where are thirty-ſeven *præparata.*

" Cynoſbati *officin.* Flores, fructus, ſpongia, & interdum radix. *Vires.*
" Flores conveniunt in qualitatibus cum roſis ſativis, ſed majorem vim aſtrin-
" gendi habent, proinde in profluvio uteri rubro & albo, ſummæ ſunt æſti-
" mationis. Fructus vi lithontriptica maximopere commendantur, in qua
" tamen excellunt exempti arilli. Spongiæ itidem calculoſos efficaciſſime ju-
" vare dicuntur, & imprimis qui inibi continentur lapilli ac vermiculi, quo-
" rum hi quoque ad lumbricos fugandos commendantur. Radix ſpicula ex
" corpore extrahit, impoſita. *Præp.* Fructus conditi, Rob. Cynoſb. ſpiritus
" ſeu aqua ſpongiarum, & ſpiritus alcaliſatus." *Schrod.* 580.

1. The flowers of them all are of a ſweetiſh taſte at firſt, then bitteriſh, and ſubaſtringent; and of a pleaſant ſmell, the damaſk being the moſt fragrant. " Roſa rubra, odoris gratia & ſuavitate quamvis albam ſuperat, damaſcænæ
" neutiquam conferenda eſt. Folia (vero) probe exſiccata & repoſita, tum
" colorem tum odorem diutius retinent, quam damaſcænæ folia, quantalibet
" cura & diligentia aſſervata." *J. B.* " Odor rubræ quamvis ſatis validus eſt,
" nobis non admodum gratus videtur." *R. H.* 1468. " Roſæ damaſcænæ
" flores dum virent odoratiores ſunt rubris & albis, imo omnium, non dico
" roſarum ſed florum in genere longe odoratiſſimi, ut quæ halitu ſuo ſuaviſ-
" ſimo ſenſum mirifice oblectant, citra ullam omnino offenſionem aut ſatieta-
" tem." *Ibid.* " Roſæ omnes habent odorem aromaticum gratum, & ſapor-
" em ſubacrem & auſterum." *Nucl. Belg.* 246. They loſe much of their ſcent by drying: decocting, yea bruiſing, almoſt deſtroys it; only the red dried ſmells rather ſweeter than when ſucculent. So—2. Our ſenſes diſcover in roſes an agreeable, and as it were chearing aromatic ſpirit, to which its cordial virtues are attributed, and which can only be ſeparated by diſtillation; which alſo ſhews it to be lodged in a ſubtil eſſential oil (indicibilis ſuavitatis) and in a very ſmall quantity: alſo a diluent and bitteriſh juice, probably ſaline, to which they owe their purgative quality: and likewiſe their aſtringency is evident to the taſte, and greater, or more obſervable, in the red than in the other two; which mixing a ſolution of green vitriol with their infuſions alſo confirms. None of theſe are exceſſive in degree, but all very friendly to nature. Hence they are anodyne, but not narcotic; ſtrengthening, but not conſtipating. And—3. Commended and uſed both outwardly and inwardly in many diſeaſes. Vide *Dod.* 189. or *R. H.* 1476. " Egregias vires & effica-
" ciam medicamentorum e roſis præparatorum in phthiſi, podagra, calculo,
" canum rabidorum morſu, capitis doloribus aliiſque morbis, in fluxibus alvi
" aliarumque partium, in febribus, hæmorrhagiis, vulneribus, inflammatio-
" nibus, inſectorum punƈturis, ſcorbuto, mobilitate dentium." Vide apud *Car. Roſenbergium in Rhodologia ſua. R. H.* 1477. Aſtringency is the principal quality of all the other parts of the roſes. " Radix ſylveſtris roſæ ad morſum
" canis rabidi unicum remedium, oraculo repertum; uti *Plinius*, l. 8. c. 41.
" ſcribit." *Dod.* 190. " Ad canis rabidi morſum vero unico remedium ora-
" culo quodam nuper (invento) repertum, radix ſylveſtris roſæ, quæ cynorro-
" dos appellatur." *Plin.* l. 8. c. 41. p. 195.

SECT. III.

They may be uſed any way as far as ounces. The preparations from them are various, as ſyrupus de roſis ſiccis, mel roſatum, conſerva roſarum, acetum roſaceum, oleum roſarum coctum, tinctura roſarum (in all which the red roſes are ordered) ſyrupus roſarum pallidarum, and aqua roſarum pallidarum. Vide *Hoffman.* p. 60. § 27—42.

ROSMARINUS.

SECT. I.

Roſmarinus. *offic.* Roſmarinus hortenſis, anguſtiore folio. *B. P.* 217. *T.* 195. *H. Ox.* iii. 410. Roſmarinum coronarium. *Dod.* 272. *Ger.* 1292. Roſmarinus coronarius, fruticoſus. *J. B.* 225. *R. H.* 515. Libanotis coronaria, ſive Roſmarinum vulgare. *Park.* 74. p. 425. Roſmarinus. *H. Cliff.* 14. Common Roſemary.

It grows wild in South-France, Spain, Italy, &c. In our gardens it flowers in April. The leaves, tops, and flowers, are uſed. " *Offic.* Folia, flores " (ſpecialiter anthos *offic.*) ſemen." *Schrod.* 665. " Folia, flores." *Ph. Edin.* " Summitates, flores." *Pharm. Lond.* rectius. " Λιβανωτις. *Dioſcorid.* l. 3. " c. 89. ab odore thuris nomen habet. *Galeno* 7. ſimpl. λιβανωτις στεφα- " νοματικα, quod ea στεφανοπλοκοι, coronarii, ad corollas utantur. Genera " tria fecit Dioſcorides & Galenus. . . Plinio, l. 24. c. 11. genera duo; alte- " rum ſterile; alterum cui & caulis & ſemen reſinaceum, quod cachrys voca- " tur: foliis odor thuris. *At.* l. 19. c. 12. Roſmarinum coronarium, cum " aliis ſpeciebus confundit. Hic de coronario agimus, quem aliqui cneoron " nigrum Theophraſti, & caſiam Hygini volunt." *B. P.* " Galenus, 7. ſim- " plicium, expreſſe ait Romanos (λιβανωτιδα στεφανοματικην) ῥοσμαρινον vo- " caſſe. Ex quo impugno vulgarem morem declinandi, ut reſpublica, & " alia talia. Si enim, ut Ill. Scaliger me docuit το rus non eſt Græcum, ſed " Syriacum, & ſignificat idem quod ἐρυθρος, nec declinationem Græcam ad- " mittit, multo minus Latinam. Sed ita eſt, in horto medico inter botanicos " licent talia." *Hoffm.* p. 437. Pliny has it often roſmarinum (n. g.) alſo in Accuſ. and yet in the title, c. 11. lib. 24. it is De rore marino, &c. It is thought to be the *roſ. Virgil.*

" Nam jejuna quidem clivoſi glarea ruris.
" Vix humiles apibus caſias roremque miniſtrat." *Georg.* ii. v. 212.

" Libanotes quam Romani ῥοσμαρινον vocant, quaque coronarii utuntur, virgultis " eſt tenuibus, circa quæ folia exeunt minuta, denſa, oblonga, & gracilia, " ſubter incana, ſuperne virentia, (βαρυοσμα) gravi odore. Vi porro excal- " factoria pollet, regiumque morbum ſanat, &c." *Dioſcorid.* l. 3. c. 89. p. 209.

SECT. II.

It is a ſtimulating antiſeptic, attenuant, diaphoretic, and carminative; more penetrating and more agreeable than lavender; called cephalic, cordial, nervine

nervine and uterine: and is recommended internally in the vertigo, apoplexy, lethargy, palſy, epilepſy, aſthma, palpitation of the heart, faintings, fluor albus, ſterility, &c. and outwardly for ſwellings, contuſions, inflammations, gangrenes, fiſtulas, &c.

" Calfaciunt & ſiccant 2. lenta incidunt, ſaporis ſunt mixti, acris, amari, " ſubaſtringunt, cephalica ſunt e præcip. ut et uterina. *Uſus præcip.* in af- " fectibus capitis ac nervorum, apoplexia, epilepſia, paralyſi, vertigine, caro, " &c. Viſum acuunt; fœtorem anhelitus emendant; epatis, lienis, ac uteri " obſtructiones reſolvunt. Ictero ac fluori albo mulierum medentur, corque " confortant. Extrinſecus proſunt in catarrhis (ſuffitu) & exinde natis affec- " tibus, in utero corroborando, &c. N. flores aſſervari poſſunt per biennium. " *Præp.* 1. Aqua, e planta integra. 2. Oleum ſtillat. 3. Balſamus fit ex " oleo. 4. Conſerva, ex floribus anthos. 5. Species dianthos." *Schrod.* 665. Acria aromatica ſunt, & uterina, in *Boerh. Lib. de M. M.*

1. It is of an acrid, aromatic and bitteriſh taſte, and fragrant, reſinous and comforting ſmell; the flowers are rather milder and more agreeable. " Roſ- " marinus ſuffrutex jucundiſſimi odoris, thus redolentis." *J. B. R. H.* " O- " doris eſt valde grati, aromatici; ſaporis calidi, grati." *Nucl. Belg.* 247.— 2. It abounds with a penetrating, eſſential, and balſamic oil, very friendly to nature, though greatly exciting and ſtimulating. " Solo uſu olei roſmarini " chymici propinati in decoctis idoneis ante paroxyſmum, multas febres ter- " tianas exquiſite curatas eſſe in noſocomio Pariſienſi, obſervavit *M. Jacques.*" Doſis gut. iv. vel v. *Sim. Paulli Q. Bot.* ii. 133. *R. H.* " Herba ipſa ſuffitu " & vapore ſuo, peſtis tempore aerem emendat, & ſalubrem reddit. Fumus " ore hauſtus peti in modum, utilis cenſetur adverſus tuſſim, phthiſin, & " tabem pulmonum. Semen cum vino hauſtum ad icterum commendat Mi- " raldus. Diarrhœam trimeſtrem deſperatam vino roriſmarini curatam refert " Velſchius. Ad viſum acuendum conducunt flores, &c." Vide *R. H.* 515. See there the whim concerning roſemary-combs in *France.*

SECT. III.

It may be uſed like lavender. The preparations are, conſerva florum anthos, oleum herbæ roriſmarini, & aqua reginæ Hungariæ. The flores are uſed in the aqua pæoniæ compoſita, tinctura cephalica; the herba in the unguentum nervinum; the oleum in the ſpiritus lavendulæ compoſitus, ſpiritus ſalinus aromaticus, balſamum ad apoplecticos, balſamum ſaponaceum; and the conſerva in the electuarium cardiacum.

Florum anthos appears a tautology; and is ſo, if by roſmarini flores be not underſtood the flowers with the flower-cups; and by florum anthos the picked flowers without their cups.

" Aqua R. Hungariæ is thus prepared—℞ Florum anthos ℔ij. vini recti- " fic. ℔iv. Flores recentiſſimi ſtatim ſubjiciantur diſtillatione ex B. M." *Ph. Edinb.* p. 37. *Charas* orders florum ℔iv. ſpir. vin. ℔vi. and ℔iv. to be drawn off. *Ph. Roy.* 631.—" Spiritus roriſmarini of the Pharm. Lond. is— " ℞ ſummitatum roriſmarini recentium ℔iß, ſpiritus vinoſi tenuioris cong. 1. " diſtilla balnei calore donec eliciantur ℔v." If it be as good as the former, it

it must be much cheaper. Are any of them equal to that brought from France? Vide *James's Disp.* p. 646. and *Lem. Pharm.* 525.

RUTA.

SECT. I.

Ruta, Ruta hortensis. *Offic.* Ruta hortensis, latifolia. *B. P.* 336. *T.* 257. Ruta graveolens, hortensis. *Dod.* 119. Ruta sativa, vel hortensis. *J. B.* iii. 197. *R. H.* 874. Ruta hortensis. *Ger.* 1255. Ruta hortensis major. *Park.* 132. Ruta hortensis major, latifolia. *H. Ox.* ii. 507. Ruta, foliis decompositis. *H. Cliff.* 145. Common or Garden-Rue; by some Herb-of-grace.

It grows in Spain, &c. In gardens it flowers in June. The leaves, flowering tops, and fruit, or seeds with their seed-vessels, are used. "*Offic.* Herba "ac summitates, cum seminibus." *Schrod.* 668. "Herba, semen." *Pharm. Edinb.* "Folia." *Pharm. Lond.* "Ruta, ῥυτη (for so it is called in Greek, "as well as πηγανον) ἀρυω, servo, quia (ut *Dioscor.* ait) valetudinem conser-"vat." Et e *Plutarcho*—"Aiunt facultate sua πηγανον dictum, quod ficci-"tate sua & calore condenset & coagulet semen. Hinc uterum gerentibus "inimicum est." *R. H.* 874. *Dioscorides*, l. 3. c. 52. p. 193. is long on the virtues of πηγανον; but does not describe it, though he compares the leaves of a great many plants to the folia rutæ; as of the ambrosia, serpillum, hypecoum, hypericum, and rosæmum, polygonum, polemonium, peplos, apios, & trifolium asphaltites. More of it is to be found in Theophrastus. Vide *Bodæum* 797.

SECT. II.

It is antacid, acrid, detergent, diaphoretic and diuretic, powerfully dissolving as well as stimulating; called alexipharmic, cephalic, nervine and uterine; and is commended internally in malignant fevers, pestilence, poisons, bites of mad dogs, serpents, &c. in cachexies, scurvies, agues, palsies, epilepsies, palpitatio cordis, vapours, melancholy, worms, &c. and outwardly, for pains, inflammations, tumors, gangrenes, &c.

"Calfacit & siccat 3. incidit, attenuat, digerit, discutit; est alexipharmaca "cephalica ac nervina. *Usus præcip.* in variis morbis, peste, aliisque affectibus "malignis præservandis ac curandis, veneno arcendo, visu acuendo, lascivia "reprimenda, pleuritide curanda, imbecillitate ventriculi corrigenda, colica "discutienda, morsu canis rabidi debellando, &c. Extrinsecus in ictibus ser-"pentum, carbunculis, in febrium paroxysmis arcendis (inuncto dorso) ce-"phalalgia ex craphula, hemicrania, in febribus malignis (pro epithemate "pulsuum cum sale communi & aceto) in dolore capitis, febrium ardentium "& malignarum (similiter pedum plantis adhibita). N. nimius usus internus "officit gravidis. *Præp.* 1. Aqua stillat. ex planta cum cauliculis Maio col-"lectis. 2. Oleum stillat. 3. Oleum infusum, ex infusa herba in oleo "communi. 4. Sal ex herba incinerata. 5. Acetum ex infusione. 6. Bal-

" ſamus ex oleo ſtillatitio." *Schrod.* 668. Antacida, alcaleſcens, ſcorbutica " lenior, acris aromatica, & uterina eſt, in *Boerh. Lib. de M. M.*

1. It is of an hot, biting, bitter, diſagreeable taſte, and ſtrong fetid ſmell. " Coma rutæ acrem, aromaticum, interimque gravem ſpirat odorem; ſapore " amaro, fervido, tenui palatum excalfacit; maxime viridia adhuc florum " capitula." (*E Cordo*) *R. H.* The ſeed-veſſels are alſo very ſtrong, and are ſaid to abound moſt with oil. " Semina ſaporis ingrati, odoris gravis. In " capſulis ſeminalibus omnis vis concentrata, ex illis enim plus olei extrahitur, " quam ex integris ſeminibus & caulibus." *Herman. Cynoſ.* 296. " Rutæ vis " concentrata conſiſtit in capſulis ſeminalibus." *Ibid.* p. 485. Yet the oleum rutæ eſſentiale is directed to be diſtilled from the folia only. *Ph. Lond.* 36.—2. Summitatum thea is of a citron colour, very tranſparent, and taſtes and ſmells of the herb. It reddens ſomewhat the ſol. heliotropii, but ol. tartari does not alter this redneſs. Sol vitrioli turns it to a dark green, though it is ſtill pellucid and without precipitation. Sp. vitrioli weakens the tincture of the tea, and deſtroys its ſmell, which in the other mixtures is not altered.—3. Though the acrimony of rue is very penetrating, and much flies off in drying, yet the ſimple water is not very ſtrong. " Tantæ eſt acrimoniæ ut " per triplices chirothecas ad legentis manus penetrare, non ſemel expertus " ſum: & ſi quis, qua eam decerpſit manu, faciem demulceat, illico vehe- " mentem inflammationem excitat, quemadmodum rectiſſime ſcripſit Dioſco- " rides." *Cluſ. H.* ii. 136. Where ſee the effect this ruta montana had on his companion, who put ſome of it into his hat.—4. I have not obſerved it infeſted with inſects; and it is ſaid to be hated by toads, and therefore planted among ſage. Hence " *Salvia cum ruta faciunt tibi pocula tuta*; as ſome apply it.—5. It inflames and ulcerates the ſkin, like horſe-radiſh: hence outwardly it is a remarkable drawer, detergent, &c. and inwardly is commended for the gonorrhœa, ſmall-pox, meaſles, lethargy. Convenit quoque ſatyriaſi & priapiſmo. *Herman.* l. c. It is ſaid to have been a principal ingredient in *K. Mithridates*'s antidote, according to the receipt found with him when conquered by *Pompey*. " In ſanctuariis Mithridatis maximi regis devicti, Cn. " Pompeius invenit, in peculiari commentario ipſius manu, compoſitionem " antidoti, e duabus nucibus ſiccis, item ficis totidem, & rutæ foliis viginti " ſimul tritis, addito ſalis grano: & qui hoc jejunus ſumat, nullum venenum " nociturnum illo die." *Plin.* l. 23. c. 8. p. 604. lin. 1. *Serenus Samonicus* (qui floruit circa an. 240.) thus deſcribes it:

" Antidotus vero multis Mithridatica fertur
" Conſociata modis: ſed magnus ſcrinia regis
" Dum raperet victor, vilem deprehendit in illis
" Syntheſin, & vulgata ſatis medicamina riſit.
" Bis denum rutæ folium, ſalis & breve granum,
" Juglandeſque duas, totidem cum corpore ficus;
" Hoc oriente die parco conſperſo Lycæo
" Sumebat, metuens dederat quæ pocula mater."

The *Schola Salernitana*, c. 37. p. 427. celebrates it thus:

" Nobilis

" Nobilis eſt ruta, quia lumina reddit acuta;
" Auxilio rutæ, vir lippe videbis acute;
" Cruda comeſta recens, oculos caligine purgat.
" Ruta viris minuit Venerem, mulieribus addit *.
" Ruta facit caſtum, dat lumen, & ingerit aſtum.
" Cocta & facit ruta de pulicibus loca tuta."

Vide quæ habet *Renatus Moreau in Animad.* p. 432.

" Ruta (πηγανον) urinam magis quam alvum movet. Quandam etiam co-
" gendi vim habet; & præpota adverſus venena valet." *Hippoc. de victus rat.* l. 2. *Foeſ.* p. 359. l. 34. " Ad omnem puerperii purgationem ſi non probe
" reſpondeat. . . Bibat crethini ſemen & ſeſelios, ac πηγανε καρπον, aut ſuc-
" cum, ita ut utriuſque obolos duos ſimul tritos, ex vino meraco exhibeas,
" ſi non febriciter." *Hippoc. de Morb. Mul.* l. 1. p. 624. l. 37. Who alſo frequently orders the folia & radix.

" Ruta utraque (ſylveſtris & hortenſis) urendi vim habet, calfacit, exulce-
" rat, urinam ciet, menſes ducit, ac tum cibo tum potu alvum ſiſtit. Semen
" acetabuli menſura, e vino bibitum contra lethalia medicamenta eſt pro anti-
" doto. Quin & folia per ſe præſumpta, aut cum nucibus juglandibus aridiſ-
" ve ficis, venena irrita & inefficacia reddunt; & contra ſerpentum ictus va-
" lent. Genituram ſeu eſitata ſeu bibita ruta extinguit. . . . Si montana ſub
" id tempus quo florere incipit, ad muriæ condituram colligatur, cutem rube-
" facit, ac inflat, cum pruritu & vehementi inflammatione. Ea itaque unctis
" antea manibus & facie colligere oportet. Tradunt & ſuccum gallinaceis
" pullis inperſum feles arcere, &c." Vide *Dioſc.* l. 3. c. 52. p. 193. where it is commended in many diſeaſes, both outward and inward; and particularly the epilepſy: as it is alſo by many moderns. Vide *R. H.* But its antaphrodiſiac virtue I reckon imaginary.

SECT. III.

The freſh herb may be given, or its juice, with wine, &c. or uſed like tea to ʒß or ʒj. the aqua rutæ to ʒiv. oleum eſſentiale ad gut. v. well rubbed with ſugar and diluted. Rue is in the aqua alexiteria, aqua bryoniæ compoſita, aqua pæoniæ compoſita (in the firſt folia, in the ſecond herba, and in the third ſummitates, *Cur?*) aqua theriacalis, unguentum vermifugum; and the oleum eſſentiale is in the pulvis vermifugus, & unguentum nervinum. We have alſo an oleum rutaceum coctum, and a conſerva foliorum, which is good only while recent.

The aqua rutæ ſhould be diſtilled from the freſh leaves and tops, with the flowers, and alſo green fruit on them. It is of ſignal uſe for the fits and gripes of children; as well as hyſteric mixtures, &c. I remember the great *Boerhaave* ſaid of it in the garden, *Dolia ejus quotannis abſumo.* Vide alſo his *Chem.* ii. p. 77. For the oil the fruit ſhould be further advanced. Does it need any other drying?

* N. B. " *An revera ita res ſeſe habeat merito ambigitur.*" R. H.

In the aqua epidemia, *Ph. Ed.* 1744. there are five of the ingredients which were in the former editions excluded, viz. valeriana ſylv. meliſſa, ruta, ſemen leviſtici, & bacc. juniperi; of which as good an aqua epidemia may be obtained as from what remain, if not a better. "Of theſe which now remain "the two firſt are perhaps the moſt liable to objection of any. Nor is the "zedoary a ſubſtance proper for this treatment." *Lewis Pharm.* p. 113. Whereas the imperatoria and zedoaria are the beſt ingredients in it; the petaſitis, ſerpentaria, ſcordium, and baccæ lauri contributing little to its virtues.

SABINA.

SECT. I.

Sabina, Savina, *Offic.* Sabina, folio tamarici Dioſcoridis. *B. P.* 487 Sabina. *Dod.* 854. *Lob.* 625. Sabina ſterilis. *Ger.* 1376. *J. B.* i. 2. 288. Sabina vulgaris. *Park.* 1027. *R. H.* 1415. Sabina mas. *Tab. Ic.* 945. Juniperus, foliis inferne adnatis, oppoſitionibus concatenatis, mas. *H. Cliff.* 464. Common Savin.

It grows without any culture in Italy, &c. The tops are uſed." "*Offic.* "Folia." *Schrod. Ph. Ed.* and *Lond.* male. "*Uſu.* ſummitates." *Dale* rectius. "Sabina Latinis dicta a Sabinorum regione. . . Sexu differre videtur: "eſt enim duplex, 1. mas, ſeu ſterilis, quæ flores duntaxat profert, non "fructum: cujuſmodi ſe Montbelgardi vidiſſe *J. B.* narrat ſæpius florentem, "verum nullas unquam baccas in ea obſervaſſe, ſterilem etiam manſiſſe variis "in locis a ſe plantatam. 2. Fœmina, ſeu fertilis, quæ baccas profert, non "flores. Botanici plerique ſabinam vulgarem omnino ſterilem faciunt. Ve"rum id naturæ analogiæ repugnat, & *J. B.* differte affirmat eam baccas pro"ferre. In noſtro ſolo & cœlo raro, forte nunquam, fructum edit. At in "loco natali, *Amani* & *Olympi Phrygiæ*, cacuminibus proculdubio ferax eſt." *R. H.* 1415. Not obſerving that his Sabina vulgaris is the mas, ſeu ſterilis; and his Codrus the baccifera fructu minore, cœruleo, (*Ibid.*) or Sabina folio cupreſſi. *B. P.* 487. . . Sabina baccifera. *J. B.* i. 2. 288. *Ger.* 1376. is the Sabina fœmina ſeu fertilis. It is (probably, if not certainly) the βραθυς, *Græcorum.*

"Sabinam (βραθυς) nonnulli βαρυθρον appellant: cujus duo ſunt genera. "Unum foliis quidem eſt cupreſſo ſimile, at ſpinoſius, graveolens, acre, ac "ferventis naturæ. Curta eſt arbor, ac ſeſe magis in latitudinem fundit: "foliis quidam ad ſuffitus utuntur. Alterum genus eſt folio tamarici ſimile. "Utriuſque folia . . . cum vino pota, ſanguinem per urinas educunt & partus "expellunt: id ipſum tum appoſitu, tum etiam ſuffitu præſtant." *Dioſc.* l. 1. c. 104. p. 55. I find it not in *Hippocrates.* It is Sabina in *Pliny.* l. 24. c. 11.

SECT. II.

It is an acrid ſtimulating diuretic and emmenagogue, called ecbolic; and is commended internally for obſtinate female obſtructions, hard labour, retention

of the secundines, gonorrhœa, worms, &c. and externally for scabs, spreading ulcers, tooth-ach, warts, &c.

" Calfacit & siccat 3. partium est tenuium, incidit, attenuat, discutit, " *Usus præcip.* in mensibus fortiter ciendis, fœtu ejiciendo, urina pellenda, " asthmate medendo. Extrinsecus in affectibus uterinis, ulceribus, serpentibus " arcendis, scabie, præcipue capitis infantum, exsiccanda ac curanda (cum " cremore lactis), in maculis faciei abstergendis. *Præpar. aqua ex foliis.*" *Schrod.* 669.

1. It is of an acrid bitter taste, and ungrateful smell. " Odore gravi est, " sapore acri." *J. B.* " Odore gravi & ingrato, sapore acri." *R. H.* " Sa- " poris est ingrati, fere instar terebinthinæ, sed multo acrioris, odoris fortis " & ingrati." *Nucl. Belg.* 250.—2. It is said to kill worms in horses, cows, dogs, as well as in children. " Oleum Sabinæ ventri inunctum, aut frondes " ejus tusæ & umbilico impositæ, vermes puerorum enecant. Decoctum in- " tro sumptum idem præstat. Verum usum ejus internum minus tutum pu- " tat Parkinsonus. Nos tamen novimus succi expressi cochl. 1. cum lacte " mixt. saccharo edulcoratum, maximo cum successu pueris verminantibus " exhibitum. Estque sane medicamentum efficaciſſimum & minime periculo- " sum, quod post alia multa incassum usurpata, optatum sæpenumero, ne " dicam semper, sortitur effectum, etiam in deploratis pene. Equis etiam " & bobus in eundem usum frequenter exhibetur." *R. H.* 1416.—3. It is commended also in the jaundice, dropsy, asthma, gout, fluor albus, corns, &c. Vide *Boecler. in Cyn. Herman.* p. 488. Also for the vermis umbilicalis. *Sennert.* (prax. l. 3. par. 10. c. 4.) " Pene infamis facta est apud nos, quod " nobile ἀτιμιον sit apud vulgus." *Hoffman.* 440. But I doubt of its being so dangerous, as is commonly believed, in pregnancy; though it cannot be often proper there.

SECT. III.

It may be given dried in powder to ʒß. in infusion to ʒj. the juice to ℥ß. or ℥j. oleum to gut. v. aqua to ℥ij. The summitates (not folia) are in the aqua bryoniæ composita: folia in the unguentum vermifugum. For the oleum the herba is ordered; which oil is an ingredient in the pulvis vermifugus. " A cataplasm of the seeds, bruised with sal gem and oil, is said to be " excellent for an anchylosis." *James's Disp.* p. 424. It carries no seed. Vide *Lewis Ph.* p. 232.

SALVIA.

SECT. I.

1. Salvia, Salvia major, Salvia hortensis. *offic.* Salvia major; (an sphacelus Theophrasti?) *B. P.* 237. *T.* 180. Salvia major. *Dod.* 290. *Ger.* 764. Salvia latifolia. *J. B.* iii. 304. *R. H.* 509. Salvia major vulgaris. *Park.* 49. *H. Ox.* iii. 399. Salvia, foliis lanceolato-ovatis, integris, crenulatis; floribus spicatis, calycibus acutis. *H. Cliff.* 12. Common-Sage, or Great Garden-Sage.

2. Salvia

2. Salvia minor, Salvia hortenſis minor. *offic.* Salvia minor, aurita & non aurita. *B. P.* 237. *T.* 181. *H. Ox.* iii. 400. Salvia minor. *Dod.* 290. *Ger.* 764. *R. H.* 510. Salvia minor ſive pinnata. *Park.* 50. Salvia minor auriculata. *J. B.* iii. 305. Varietas prioris *Linnæo.* Small-Sage, or Sage-of-Virtue.

They grow wild in Languedoc, Italy, &c. In our gardens they flower in June. The leaves, young ſhoots, and flowers are uſed. " Et major & minor uſualis, ſed minor præſtantior. *Officin.* Folia, flores." *Schroder.* 669. " Majoris herba, flores: minoris herba." *Pharm. Edinb.* " Majoris folia." *Pharm. Lond.*

" Salvia, quod ad multa, præſertim ad fœcunditatem, ſalutaris ſit: cum " ſteriles, hujus uſu frequenti gravidæ reddantur, quare Agrippa ſacram herbam vocavit, Aëtio auctore. Ἐλελισφακον Dioſcoridi (quaſi in tabem redacta, cum herba ipſa ſemper retorrida & exſucca videatur, id enim σφακος & σφακελος ſignificat; folia enim attritis veſtibus comparantur) & ἐλαφοβοσκον, & σφαγνον dicitur. *Plinius.* l. 22. c. 25. (ait) noſtri qui nunc ſunt herbarii, elelisphacon Græce, Latine ſalviam vocant, mentæ ſimilem, canam, odoratam." *B. P.*

" Salvia, (ἐλελισφακον) quam alii elaphoboſcon, alii ſphagnon nominant, " frutex eſt oblongus, ramis numeroſis, virgas habens quadrangulas & albicantes; folia mali cotoneæ effigie, ſed longiora, aſperiora, craſſioraque, & attritarum veſtium modo, ita parum villoſa, ut vix quiſquam villos animadvertat, ſub albida, vehementer odorata, ſed viroſa σφοδρως ἐυωδη, βρωμωδη, i. e. vehementer ſuaveolentia, (vel benevolentia) graveolentia, or vehementer ſed graviter fragrantia, or ſuaveolentia cum gravitate?) Semen ſummis in caulibus ſylveſtri hormino ſimile gerit: in aſperis naſcitur. Foliorum ramorumque decoctum &c." *Dioſcorides*, l. 3. c. 4. Hence, and not without reaſon, by the conſent of all botaniſts, his elelisphacon is our ſalvia. Though *Mr. Geoffroy* (vide *Artemiſia M. M.* iii. p. 121.) knew it not.

SECT. II.

They are aromatic and aſtringent, or antiſeptic, attenuant, ſtrengthening, and diaphoretic; called cephalic and uterine, and commended internally in the vertigo, palſy, trembling of the joints, obſtructions and overflowing of the menſes, green-ſickneſs, ſterility, cachexy, ſcurvy, rheumatiſm, gout, ague, infectious diſeaſes, &c. and outwardly for the aphthæ, ulcers, gangrenes, &c.

" Calfacit & ſiccat, ſubaſtringit, abſtergit. *Uſus præcip.* eſt diureticus: menſes ob craſſitiem remoratos ciet, nimios emendat. Prodeſt in paralyſi, vertigine, tremore, catarrhis. Extrinſecus aphthas oris abſtergit (in gargaris.) &c. *Præpar.* 1. Aqua, ex herba cum floribus. 2. Oleum ſtillat. 3. Sal, ex herba incinerata. 4. Conſerva, ex floribus." *Schrod.* 670. Eſt ex acribus, ſtimulantibus aromaticis, antiſcorbuticis lenioribus, & uterinis, in *Boerh. Lib. de M. M.*

1. It is of a bitteriſh, aromatic, and aſtringent taſte; and fragrant ſmell, ſomewhat heavy. " Folia menthæ foliorum forma .... odore, eximio, aromatico,

" matico, ſapore cum aromatica amaritudine acriuſculo, & calido." *J. B.* " Odore & ſapore aromatico vehementiore." *R. H.* " Salvia parva optima " eſt, ſaporem habet ſubamarum, acrem, calidum; odorem aromaticum." *Nucl. Belg.* 253.—2. Green vitriol turns ſage tea black like ink.—3. It is ſaid that the freſh leaves (and juice) cure the prickings (puncturas) of waſps and ſpiders in the *Ephem. Germ.* as quoted in *R. H.* 510; and that toads delight much to lodge among ſage, and ſometimes infect it with their poiſon. " Hinc ex Joan. Boccatio narratur lugubris caſus duorum amantium, qui " labiis leviter affricta ſalvia ſubito occubuerunt. Paræus audiviſſe ſe teſtatur, " duos mercatores ſalviam illotam vino immerſiſſe, eoque epoto, mox, non " ſine horrendis ſymptomatibus, obiiſſe. Vide *Amb. Par.* p. 596. (it is l. 21. " c. 31. p. 786. edit. Paris. 1585. in fol.) Vix quidem credibile eſt tam " præſentaneum virus bufonibus ineſſe. . . . Athan. Kircherus (in ſcrut. peſtis) " bufones abſolvit, & crimen rejicit in vermiculos, quos microſcopii beneficio " infra plantæ aſperitatem detexit, comparentibus ſimul bullulis, velut ovis " animalculorum, quæ virulento ſuo humore, ingentem homini noxam ad- " ferre poſſunt: quæ tamen vel digito abſterſo folio, aut aqua loto, ſtatim " diſparebunt: unde (inquit) veram cauſam pernicioſæ qualitatis ſalviæ non " lotæ collegi. At pace tanti viri, folia decies lota, bullulas iſtas non di- " ponunt. . . . Accuratiſſimus D. Hooke bullulas has, ſeu globulos pellucidos, " nihil aliud eſſe affirmat, quam ſuccum quendam gummoſum, quem folia, " ut & caules & flores, exſudant; nam per totum anni decurſum, eos hærentes, " & fere nihil mutatos obſervavit." *Micrographia* (*Obſ.* 24.) p. 142. *H. Ox.* iii. 400.—4. Sage however is generally eſteemed a wholeſome herb, and is often eaten in the ſpring, eſpecially in May, with butter, to purify the blood, and preſerve health. " Nonniſi diligenter lota & mundata, ſays Mr. Ray, " in cibis uſurpanda eſt." *R. H.* The Chineſe are ſaid to prefer it to their own tea. Thus the *Schola Salernitana* celebrates ſage, cap. 38. p. 406.

" Cur moriatur homo cui ſalvia creſcit in horto?
" Contra vim mortis non eſt medicamen in hortis.
" Salvia confortat nervos, manuumque tremorem
" Tollit: & ejus ope febris acuta fugit.
" Salvia, caſtoreumque, lavendula, primula veris,
" Naſturt. Athanaſ. hæc ſanant paralytica membra.
" Salvia ſalvatrix naturæ conciliatrix."

It may be uſed like tea, or any other way. We have no preparation of it. The ſummitates are in the aqua pæoniæ compoſita. The conſerva florum is omitted in Pharm. edit. 1744. unleſs included in the addit. &c. Some prefer the ſalvia minor, as *Schroder*, *J. B. Nucl. Belg.* &c. The *Lond. Pharm.* the major. *Hoffman* makes no difference; nor can I make any. " The ſmall is " the ſtrongeſt; the large moſt agreeable." *N. Diſp.* p. 197. Cujus contrarium eſt verum. Vide *Ibidem* what is ſaid of aqueous infuſions.

SAMBUCUS. *Vide Roots.*

SANICULA.

SECT. I.

Sanicula, Sanicula minor, Diapenſia. *Offic.* Sanicula officinarum. *B. P.* 319. *T.* 326. *H. Ox.* ii. 616. Sanicula. *Dod.* 140. Sanicula mas Fuchſii; ſive Diapenſia. *J. B.* iii. 2. 639. Sanicula ſive Diapenſia. *Ger.* 948. *R. H.* 475. *Syn.* 221. Sanicula vulgaris, ſive Diapenſia. *Park.* 532. Sanicula. *Cæſ.* 556. *H. Cliff.* 88. Sideritis tertia. *Col.* i. 124. Common Sanicle.

It grows in woods, thickets, &c. flowering in June. The leaves are uſed: "Creſcit in montibus ac vallibus. Colligitur Junio cum floribus. *Officin.* "Folia raro radix." *Schrod.* 672. "*Uſu.* Folia." *Dale* 131. "Herba." *Ph. Ed.*

"Sanicula, a ſanandis vulneribus nomen traxiſſe videtur. Doctiſſ. columna "ſub ſideritide tertia Dioſcoridis pingit & deſcribit." *B. P.* "Brunfels, dia- "penſia, ſennicula, pelium Hermolai (corol. 739.) pentaphyllon Collinutii, "pentaphyllon vero ne ſit, cur affirmet non habet, cur neget non videt. Ait "vulgo herbariorum diapenſiam Græce, Latine ferrariam majorem, & con- "ſolidam minorem dici." *J. B.*

SECT. II.

It is an attenuant and ſubaſtringent vulnerary; and commended in wounds, ulcers, fluxes, hæmorrhages, ruptures, ſcurvy, rickets, &c. It may be uſed in ſubſtance, infuſion, decoction, or any way, ad libitum.

"Calfacit & ſiccat, adſtringit, ſaporis eſt amari, vulnerariaque una ex "præcipuis, utilis in conſolidandis ulceribus, fiſtulis, rupturis, eroſionibuſ- "que, tam interne quam externe adhibita. *Præp.* aqua, ex herba florente." *Schrod.* 672. Roborans ſiccans, excitans, ſcorbutica, in rachitide propria eſt. *Boerh. Lib. de M. M.*

1. It is of an herbaceous, bitteriſh, aſtringent taſte, and no ſmell. "Ra- "dix eſt adſtringens. . . Sanicula Fuchſio non eſt ſimplicis naturæ, guſtu id "indicante, adſtringit ſimul & amara eſt. Statuitur calida & ſicca ordine "ſecundo." *J. B.* "Radix adſtringens, amara & fervida." e *J. B. R. H.* But *J. B.* does not ſay the root is amara & fervida. "Saporis ſubamari, & "ſubauſteri." *Nucl. Belg.* 256.—2. "By a chemical analyſis, beſides ſeveral "acid liquors, ſanicle yields a urinous ſpirit, ſome volatile ſalt, much oil, and "much earth. It contains ſome ſal ammoniac, ſulphur and terreſtrial parts; "is deterſive, vulnerary, aperitive." *T. Hiſt.* p. 531. He mentions not the taſte or ſmell. "It is of a penetrating balſamic virtue, for it has an acrid "ſort of fragrancy, in which conſiſts its virtues, and leaves an aſtringent taſte "in the mouth." *James's Diſp.* p. 430. "Vires ſunt penetrantes balſamicæ; "exhalat enim acre fragrans, in quo conſiſtit virtus, & adſtrictionis ſenſum

"in

" in ore relinquit." Ita *B. Hiſt.* pl. dicta p. 116. *ſtupide!*—3. Foliorum thea is of a pretty bitter and ſubaſtringent taſte; it dilutes only ſyrup of violets; mixed with aqua calcis it becomes yellow, but not of a urinous ſmell; and a ſolution of vitriol turns it to a deep bluiſh-green colour, and cauſes a ſmall precipitation. Hence it is evidently, though not ſtrongly aſtringent.—4. While wood-drinks were in faſhion, ſanicle was more valued and uſed than it is now. " Gallis in adagium venit vulgo jactatum, eos non egere chirurgo qui ſaniculam habuerint." *J. B.* iii. 2. 640. " Gallis in adagium venit vulgò jacta- " tum, eos non indigere chirurgo qui ſaniculam & bugulam habuerint. *Qui* " *ha du bugle & du ſanicle, fait aux chirurgiens la nicle.* . . Umbilici emminen- " tia & craſſities in pueris innumeris fere curata eſt cataplaſm. ex ſanicula " in vino cocta, umbilico appoſita, cum ligatura ſtrictiore: radice conſolidæ " majoris contuſa dorſo, e regione umbilici, admotâ." *R. H.* 476.

LECTURE LX.

SECT. I.

SATUREIA.

Satureia. *offic.* Satureia hortenſis, ſive Cunila ſativa *Plinii. B. P.* 218. Satureia. *Dod.* 289. Satureia ſativa. *J. B.* iii. 272. *T.* 197. Satureia hortenſis æſtiva. *Ger.* 575. Satureia hortenſis. *Park.* 4. *R. H.* 518. Satureia annua, Cunila dicta, vulgaris. *H. Ox.* iii. 411. Thymus erectus, annuus, foliis lanceolato-linearibus. *H. Cliff.* 306. Summer Savoury.

It grows naturally about Montpelier, &c. ſown in our gardens it flowers in July, and ripens the ſeed in autumn. " The herb in flower is uſed." *Offic.* " Herba cum floribus." *Schrod.* 675. " Herba." *Ph. Edinb.* " Sa- " tureia, aliis a ſaturando dicta, quod cibis loco condimenti addatur: alii a " ſatyris nomen traxiſſe putant, eo quod coitus marceſcentes ſtimulet. Θυμβρα " *Dioſcorid.* l. 3. c. 25. Θυμβρον. *Theoph.* 7. hiſt. 1. dicitur, forte ἀπο τȣ " θυειν, ob fragrantiam. *Plinio*, l. 19. c. 8. (p. 505.) Thymbra, quæ cu- " nila, quæ & ſatureia dicta, in condimentario genere." *B. P.* " *Columella* " tamen diſtinguit thymbram a ſatureia. Et ſatureia thymi referens thym- " bræque ſaporem. *R. H.* " Satureia, quaſi ſaporeia, a ſapore." *H. Ox.*— The ſatureia montana. *B. P.* 218. Calamintha fruteſcens, ſatureiæ folio, facie & odore. *T.* 194. Meliſſa, foliis linearibus, integerrimis. *H. Cliff.* 308. Winter ſavoury is the thymbra. *Dod.* 282. and may be uſed for the ſummer ſavoury, as they are indifferently in the kitchens. But that they are thymbræ Dioſcoridis does not well appear.

" Thymbra nota eſt, quippe quæ gignitur in tenui ſolo, aſperiſque locis, " thymo ſimilis, at minor tamen, & tenerior, ſpicam ferens florum plenam, " virentem. Eadem poteſt quæ thymum, ſi modo ſimili aſſumatur, atque " itidem ſanorum uſui apta eſt. Eſt & ſativa quædam ſatureia (σπαρτη θυμ- " βρα) ſylveſtri ad omnia inefficacior: quæ tamen propter mitiorem acrimo-

" niam commodius in cibos recipitur." *Dioſcor.* l. 3. c. 45 (not 25, as in *B. P.*) totum. p. 191.

SECT. II.

It is a warm attenuant, diaphoretic and carminative, hotter and more agreeable than hyſſop; called pectoral, ſtomachic, uterine; and commended internally in female obſtructions, flatulencies, indigeſtion, want of appetite, cough, aſthma, &c. and externally as diſcutient and anodyne. " Saporis ac odoris " eſt acris ac calidi, unde & calida ac ſicca cenſetur gr. 3. attenuat, aperit, " diſcutit. Uſus in affectibus *ventriculi*, cruditate, anorexia, &c. *pectoris* " aſthmate, &c. *uteri*, menſibus obſtructis, &c. viſum acuit. Extrinſecus " diſcutit tumores, doloreſque aurium ſedat. N. pulices necare dicitur ſtrata " in cubili. *Præp.* 1. Aqua ex herba florente. 2. Oleum ſtillat. cum aqua." *Schrod.* 675. Antacida, acris, aromatica, alcaleſcens eſt in *Boerh. Lib. de M. M.*

It is of a hot biting aromatic ſweetiſh taſte, and fragrant ſweet ſmell. " Folia odore thymi vulgaris mitiore, ſapore æque acri." *J. B.* " Odore " ſuavi vehementi, ſapore acri." *R. H.* " Saporis eſt acris & calidi; odoris " grati & ſpecifici." *Nucl. Belg.* 259. It is one of the moſt common kitchen ſweet herbs, both on account of its flavour, and of its effect in correcting the windineſs of peaſe, beans, cabbage, &c. " Uſus ejus frequens eſt in culina; " inter alia olera cum phaſeolis & aliis utiliter incoquitur & editur. Fabis " cum ſelino inciſa & infrixa edulium gratum, Belgis frequens, habetur. " *Lob.* Pauperes in Germania braſſicas capitatas hac herba condiunt, qui fit " ut illæ jucundiſſimum odorem, ac ſaporem gratiſſimum inde accipiant. *J. B.* " Eſt inter herbas calidas & acres, quæ urinam & menſes movent. Faculta- " tibus cum thymo & ſerpillo convenire aiunt. Nobis potius, ut facie, ſic " viribus ad hyſſopum accedere videtur." *R. H.*

SCABIOSA.

SECT. I.

1. Scabioſa. *offic.* Scabioſa pratenſis, hirſuta, quæ officinarum. *B. P.* 269. *T.* 464. Scabioſa vulgaris, major. *Dod.* 122. Scabioſa major, vulgaris. *Ger.* 719. Scabioſa major, communior, hirſuta, folio laciniato. *J. B.* iii. 2. *R. H.* 374. *Syn.* 191. *H. Ox.* iii. 45. Scabioſa vulgaris, pratenſis. *Park.* 484. Scabioſa corollis radiatis, corollulis quadrifidis, caule hiſpido. *H. Cliff.* 31. Common Field-Scabious.

2. Succiſa, Morſus Diaboli. *offic.* Succiſa glabra. *B. P.* 269. Succiſa, ſive Morſus Diaboli. *Dod.* 124. *J. B.* iii. 11. *R. H.* 380. Morſus Diaboli. *Ger.* 726. Morſus Diaboli vulgaris, flore purpureo. *Park.* 491. Pycnocomon Dioſcoridis. *Col. Phyt.* 35. Scabioſa pratenſis, noſtras, præmorſa radice. *H. Ox.* iii. 45. Scabioſa, integrifolia, glabra; radice præmorſa. *H. L.* 538. Scabioſa, folio integro, glabro; flore cæruleo. *T.* 466. Scabioſa radice ſucciſæ, flore globoſo.

R. Syn. 191. Scabiosa corollulis quadrifidis, caule simplici, ramis approximatis, foliis lanceolato-ovatis. *H. Cliff.* 30. Common Devil's-bit. They grow in fields, meadows, &c. The first flowers in (June or) July; the other in August. The root, leaves, and flowers of both are used. "Officin. scabiosæ "radix, (colligenda vere) folia, flores. Succisæ radix, flores, nonnunquam "folia." *Schrod.* 676. & 688. "Utriusque herba." *Ph. Lond. vet.* "Folia." *Mill. Bot.* "Succisæ herba, radix: scabiosæ herba." *Ph. Edinb.* "Usu scabiosæ folia: succisæ folia, flores & radix." *Dale.*"

"Scabiosa, aliis a scabro herbæ habetur aliis quod scabiei medeatur, quod "vox (ψωρα) psora prætendere videatur: quare ψοραν Aëtii aliqui censent: "sunt qui ad stœben Dioscoridis, l. 4. c. 12. referant. Succisa dicitur, quod "ejus radices circumrosæ sint: vulgus enim credit, dæmonem cum tantæ "efficaciæ radicem hominibus invideat, eam statim ubi succreverit, undique "circumrodere: quare morsus diaboli dicitur. Sunt qui geum veterum cen-"sent: aliis videtur nigina Plinii. l. 27. c. 12." *B. P.* Dioscorides does not describe the stœbe; but his description and virtues of the pycnocomon by no means agree with the succisa.

SECT. II.

They are attenuant, detersive, diaphoretic and subastringent vulneraries; called pectoral and alexipharmic; and are commended internally in coughs, asthmas, malignant fevers, lues venerea, epilepsy, &c. and externally in the scurvy, itch, scabies, tetters, &c. and may be used in substance, infusion, decoction, or any manner of way.

"Scabiosa calfacit & siccat usque ad 2. abstergit, attenuat, discutit, sudori-"fera, alexipharmaca, ac pulmonica est. Usus præcip. in apostematibus, "pleurisi, angina, tussi, asthmate, peste, fistulosis seu manantibus ulceribus "(mammarum, crurum, &c.) Extrinsecus in scabie, pruritu, impetigine, "ac præcipue in achoribus, tinea, furfuribus ac lendibus capitis; in fugillatis "maculis faciei, dolore hæmorrhoidum (in suffitu vaporoso.) N. radix sca-"biosæ majoris flore purpureo, specifice curare dicitur luem veneream, adeo "ut salsæparillæ vel parum vel nihil cedere censeatur. *Præp.* 1. Aqua stilat. "ex integra planta cum radice ac floribus. 2. Syrupus, ex succo. 3. Con-"serva, ex floribus. 4. Sal, ex planta incinerata." *Schrod.* 676. Emolliens suboleosa leniens, aperiens detersiva ad ulcus pulmonum nephritica, scorbutica lenior, roborans antirachitica, est in *Boerh. Lib. de M. M.*

"Succisa calfacit & siccat 2. amara, alexipharmaca, ac vulneraria est, ut "scabiosa, cum qua & reliquis facultatibus convenit. Imprimis celebratur in "epilepsia, peste uteri dolore, sanguine coagulato, abscessibus occultis, lue "venerea, ejusque ulceribus, in vulneribus recentibus, &c. Extrinsecus in "angina, tumoribus tonsillarum diuturnioribus qui ad suppurationem ægro "proveniunt (gargarism.) in fugillationibus, bubonibus, &c. *Præpar.* aqua "stillat. ex integra planta (cum radice & floribus) collecta in fine Julii." *Schrod.* 689.

1. They are of an herbaceous, somewhat bitter taste, and subacrid, affecting the lips; and of a faint smell. "Scabiosæ folia sunt sapore subacri; succisæ

" ciſæ radix, ſapore miſto, acri & amaro." *J. B. R. H.* " Scabioſa ſaporis " eſt ſubamari." *N. Belg.* 260. " The ſcabious is bitter, and reddens a little " the blue paper; which makes it probable that it contains a ſalt very like " ſal ammoniac, united to a great deal of fetid oil, and of earth: for by a " chymical analyſis, beſides ſeveral acid liquors, much oil (ſoufre) and earth, " a little of an urinous ſpirit and of volatile ſalt are got from it. It is alexite- " rial, ſudorific, aperitive, deterſive, vulnerary, and promotes expectoration. " The juice is given from ʒiij. to ʒvi." *T. Hiſt.* p. 140. " The leaves of " ſucciſa are bitter, and redden (aſſez) the blue paper; the root, which is " bitter and ſtyptic, reddens it more. The ſame virtues are attributed to it " as to ſcabious." *T. Hiſt.* p. 142.—2. Scabioſæ foliorum thea is not much tinctured; of an herbaceous, ſubacrid, bitteriſh taſte, and greeniſh ſmell: it reddens a little the ſol. heliotropii, and with a ſolution of vitriol becomes of a dark ſemi-opake green colour, precipitating, though ſlowly, a bluiſh grey ſediment. Succiſæ foliorum thea is bitterer, turns a little blacker with vitriol, and precipitates faſter. Spirit of vitriol clarifies this mixture more than it does the vitriolic mixture of the former. When both had ſtood fourteen days the ſcabious was little altered; but the ſucciſæ thea was become ſouriſh and ſtinking.—3. Many virtues are attributed to theſe plants, as if they were univerſal purifiers of the blood, not only from ſcorbutic and purulent taints, but alſo from peſtilential and venereal infections. " Noſtri medici miris ſca- " bioſam extollunt laudibus, & recte quidem, authoritate nimirum verſuum " quorundam nixi, quos S. *Urbanum* compoſuiſſe ferunt; qui ſic ſe habent:

" *Urbanus* pro ſe neſcit pretium ſcabioſæ:
" Nam purgat pectus, quod comprimit ægra ſenectus:
" Lenit pulmonem: purgat laterum regionem;
" Abſceſſus frangit, ſi locum bibita tangit.
" Tribus uncta foris anthracem liberat horis." *J. B.*

——In the *Schola Salernitana* (cap. 31. p. 395.) we have it thus;

" *Urbanus* per ſe neſcit pretium ſcabioſæ,
" Confortat pectus, quod deprimit ægra ſenectus;
" Lenit pulmonem, tollit laterumque dolorem.
" Vino potatur. Virus ſic evacuatur."——

Braſavolus, in examine ſimplicium (Romæ 1536. in fol.) gives ſix verſes of them, and ſomewhat different from the former. He ſays they were compoſed in the time of pope *Urban* II. who lived about 1099. and was the author of the Holy-War. Vide *Moreau's Animadv. in Schol. Salern.* p. 396. where ſeveral authors are mentioned who commend it much in the peſtis. " Credo " in febribus peſtilentibus ſuccum (ſcabioſæ aut ſucciſæ) in ſyr. cum theriaca, " eſſe egregium ſudorificum: bubones etiam peſtilentes, ſi ſtatim initio ap- " plicetur, diſcutere, ne ad ſuppurationem perveniant." *Hoffman.* p. 442. " In plurimis expertus eſt D. Willebrochius *(archiducis Ferdinandi M. celeber)* " ad rhagades ſeu ſciſſuras, & ſerpigines ex lue oriundas (etiam in illis in " quibus decoctum ligni parum profuit) certiſſimum remedium, pulverem

" radicis ſcabioſæ, per hebdomades tres quotidie aſſumptum." *R. H.* 374. " Dodonæi authoritate ego ſecurus plerumque gargariſmis, ubi venereis & " aliis ulceribus fauces gingivæque ſcatent, ſucciſam felici ſucceſſu miſcere ſo- " leo. Succum ipſum Camerarius utiliter admodum addi gargariſmis in angina " ait; (*Sim. Paulli.*)" *R. H.* 380. Both certainly are very ſafe; and may be given in powder, infuſion, decoction, juice or ſyrup, *ad libitum.*

SCHOENANTHUS.

SECT. I.

Schœnanthus, Juncus odoratus. Fœnum camelorum. *offic.* Juncus odoratus, ſive aromaticus. *B. P.* 11. Schœnanthum. *Ger.* 43. Juncus odoratus tenuior. *Park.* 144. Schœnanthus, ſive Juncus odoratus. *J. B.* ii. 515. *R. H.* 1310. Gramen ad Junceum accedens aromaticum, majus, Syriacum. *H. Ox.* iii. 229. Gramen dactylum, aromaticum, multiplici panicula, ſpicis brevibus, tomento candicantibus, ex eodem pediculo binis. *Plut. Phyt.* 190. Palea de Mecha & Paſtus Camelorum vulgò. *B. P.* Sweet-ſmelling Ruſh, or Camel's Hay. Iſchæmum. *Lin. G. P.* 1018. p. 525.

It grows in Arabia, Africa, &c. There is no other graſs, they ſay, in the deſerts between Syria and Egypt but this, which camels eat. It is brought from the Levant, or by the Eaſt-Indies. " It comes to Paris from Mar- " ſeilles, and is taxed as a Levant drug." *Savary's Dict.* II. All the plant is medicinal; but we ſeldom get more than the leaves, with part of the ſtalk. " The flowers are ſeldom brought to us; and, when they are brought, they " are found of little quickneſs in taſte, or ſweetneſs in ſmell; and it ſeemeth " probable that becauſe theſe ſmall ruſhes, which are now uſually in the ſhops, " are found to be more quick and hot in taſte than either ſtalks, flowers, or " roots, that are brought us, theſe are and have been received into more uſe, " and the other flowers are left off, or quite neglected to be uſed; which " hath cauſed the merchants likewiſe not to aſk for them to bring them." *Park.* 145. " Schœnum ex Arabia petitum, ad hæc, idem auctor (Andro- " machus) imponere præcipit, neſcio qua de cauſa ſchœnanthum a vulgaribus " appellatum: nobis ſiquidem cum florum copia non adſit, junco utimur ex " Arabia comportato, cujus ſummitatem cameli ſæpenumero abroſerunt, ju- " cundiſſime namque hunc juncum cameli paſcuntur, ſecus vias ibi plurimum " naſcentem. Eſt autem juncus iſte exigui pretii medicina, ſolaque odoris " integritate dijudicanda: quoniam celeriter ipſius odor expirat." *Galen de Antidotis.* l. 1. c. 14. p. 106. F. " Mirum eſt quod afferit Galenus, Junci " odorati florem non vidiſſe, nec ſuo tempore afferri; (where ſays he ſo?) " cum tamen Dioſcorides inter electionis conditiones, hunc Juncum floridum " expoſtulet. Hodie vero culmi cum floribus ſæpe afferuntur." *Geoff.* ii. 262.

" Juncus odoratus (σχοινος) alius in Africa, alius in Arabia naſcitur: " rurſumque alius in ea parte Arabiæ quæ Nabatæa dicitur: & hic quidem " omnium eſt laudatiſſimus. Secundum locum ſibi vindicat Arabicus, quem " nonnulli Babylonium, alii Teuchilin cognominant. Afer vero inutilis cen-

" ſetur.

" ſetur. Deligito recentem, ſumme ruſſum, flore copioſo (πολυανθῆ): quique " dum ſcinditur finditurve purpureſcat, tenuem, quique dum manibus con- " fricatur, ſuavem roſæ odorem emittat, multoque cum fervore linguam mor- " deat. Uſus eſt floris, culmorum, & radicis. Vim habet urinas menſeſque " ciendi, &c." *Dioſcor.* l. 1. c. 16. p. 15. *Does this agree with our Schœnanthus?*"

" Juncus odoratus ſive aromaticus. Σχοινος ἡδυοσμος, και ἐυοσμος, και ἐυω- " δης. *Hippoc.* ἀρωματικος, και μυρεψικος, græcis poſterioribus. Σχοινος, *Dioſ-* " *coridi* & *Galeno.* Juncus odoratus, *Plinio.* Juncus rotundus, *Celſo.* Squi- " nanthum, *Varroni.* Adhar & adhir, *Arabibus.* Sachbar. *Arabiæ incolis.*" *B. P.* 11.—I find alſo in Hippocrates σχοινε ἀνθος. (*de Morb. Mul.* l. 2. p. 665. l. 12.) " Eum qui hodie in officinis eſt legitimum eſſe, credam Matthiolo- " tum, cum odorem roſæ mihi exhibuerit, quem Dioſcorides deſiderat. " Multo firmius cum facultates a Galeno (8 Simpl.) illi tributas repreſentarit." *Hoffman.* p. 444. Vide *Galen.* Simpl. l. 8. p. 61.

SECT. II.

It is a warm ſtimulating aromatic, or an attenuating diaphoretic and carminative; called cephalic, ſtomachic, uterine, and alexipharmic; and is recommended in the hickup, vomiting, flatulent colics, female obſtructions, &c. but little uſed except in the mithridatium and theriaca. It may be given in ſubſtance to ʒi. in infuſion to ʒij.

" *Offic.* Culmi ſeu ſurculi (ſtramen) flores, radix. *Vires.* Calfacit, ſub- " aſtringit, tenuium eſt partium, diſcutit. *Uſus præcip.* in obſtructis men- " ſibus, epate, liene, in ventriculi inflatione, vomitu ac ſingultu, in urinæ " difficultate, renum, veſicæ, ac uteri dolore. Extrinſecus corrigit fœtorem " oris, roborat caput (lotione), diſcutit uvulæ tumorem, roborat ventriculum." *Schrod.* 677.——1. I obſerve, that it is of a hot, biting, agreeably aromatic, and ſomewhat bitteriſh taſte, and ſweet ſmell. " Of a quick and ſpicy taſte, " ſomewhat pleaſant; and of a fine ſweet, gentle or ſoft ſcent." *Park.* 144. " Ubi recens eſt hæc planta, manibus confricata jucundi eſt odoris, & ſaporis " non ingrati, licet videatur aliqua adeſſe amaritudo, cum acrimonia luculen- " ter linguam mordicante; quæ tamen ſolet efficacior eſſe, in quibuſdam foliis " remiſtis gramineis valde tenuibus & carinatis." *J. B. R. H.* " Saporis " calidi & ſubamari, odoris aromatici." *Nucl. Belg.* 262. It ſcarcely is obſervably bitter.—2. It keeps good many years, at leaſt without loſing its aroma. " Floribus recentibus aromatica tenuitas ineſt, quæ exacto anno perit, ita ut " poſt duos annos penitus inutiles ſint. . . . Oleo eſſentiali aromatico copioſo " turget, quod diſtillatione extrahitur; ſed rarioris eſt uſus in officinis.' *Geoff.*' ii. 263. Did he ever ſee the oleum eſſentiale? He ſteals all the virtues from Schroder without owning it.

" Memini Henr. Meibomium, ceu ſpecificum ad veſicæ ulcera, Schœnan- " thum herbam & cyperi radices adhibere; a quorum uſu tophus nucis juglan- " dis fere magnitudine, ex honeſtiſſimæ matronæ naturalibus locis, per urinas " fuit excretus, qui diu ſatis ægram ulcere veſicæ vicinarumque partium con- " fectam, lecto affixerat." (*è Sim. Paulli.*) *R. H.* 1311.

SCRO-

SCROPHULARIA. *Vide* Roots.

SENA.

SECT. I.

Senna, Senna Alexandrina, Folia orientalia. *offic.* Senna Alexandrina, ſive foliis acutis. *B. P.* 397. *T.* 618. *H. Ox.* 201. Sena Alexandrina, &c. *B. P. R. H.* 1742. Sena. *Dod.* 361. *Lob.* 350. *J. B.* 1, 2, 377. Sena orientalis. *Tab. Ic.* 517. *Ger.* 1297. Sena Alexandrina. *Park.* 225. Caſſia, foliolis trium quatuorve parium ſubovatis. *H. Cliff.* 159. Sena, or Alexandrian Sena.

It is a native only of hot climates, as of Arabia, &c. It is ſaid alſo to be cultivated in Syria, Perſia, &c. but is not mentioned among the Plantæ Ægypti by Alpinus. "Senne comes to Marſeilles from Alexandria, Sayde (or Sidon) and Tripoli in Barbary; from 3 to 400 quintals annually of the Alexandrian, &c." *Savary Dict.* iii. 567. "Mr. Blondel, who was long Conſul of the "French nation in ſeveral ſea-ports of the Levant, aſſures us, that the true "Sene grows only in the woods of Ethiopia, and in Arabia about Moca; "that formerly it was not to be purchaſed but at Cairo; and that what was "brought from Seyde, Tripoli, &c. was carried thither from Cairo or Arabia "by the caravans; or from Alexandria by ſea." *Savary Dict.* ii. 1537. The leaves only are uſed; though the fruit or follicles amongſt them are as good. "The beſt Senna comes from Alexandria, and ought to be of a pale yellow-"iſh-green colour, not broken, but free from ſtalks, and of a pleaſant freſh "ſcent." *Miller Bot.* 409. The ſmall footſtalks of the leaves need not be thrown away more than the pods.

"Actuarius is the firſt Greek writer, who has mentioned or deſcribed the "milder ſorts of purging medicines, ſuch as Caſſia, manna, ſena, myroba-"lans: the two laſt, he ſays, were brought from foreign parts to his coun-"try, *i. e.* from Syria to Egypt. Sena he deſcribes as a fruit; by which, "no doubt, he means the ſame thing as Serapion does by the vagina, and "Meſue by the folliculus, which contains the ſeed: for neither theſe authors, "nor Actuarius, mention any thing of the leaves. And though theſe are "chiefly in uſe now, yet the pods are ſometimes made uſe of too, and from "what we can learn from theſe writers, were probably the only part of Sena, "which was then adminiſtred in phyſic. He adds, that this ſimple is very "effectual in purging off the phlegm, as well as the bile: the firſt quality is "what the Arabian writers take no notice of. What he relates of its coming "from Syria, as well as Egypt, agrees with the beſt accounts we have of the "plant: that which is brought from the Levant being ſtill eſteemed the moſt "valuable. As to theſe ſeveral ſorts of purges he ſpeaks of, he profeſſedly "takes them from the Arabians, who without diſpute firſt introduced theſe "ſimples into phyſic." *Freind Hiſt.* i. 271.

"Scena eſt folliculus plantæ Perſis dictæ Abalzemer, Orobi modo naſcentis. "Sativa eſt & agreſtis. Folliculo quam foliis eſt efficacior, præſertim ſi is "ex viridi nigricat, modice amarus, ſubadſtringit abſolutus, recens, in quo "ſemen amplum, compreſſum; vetuſtate enim exanimatur." *Meſue de Simpl.*

l. 2. c. 15. p. 65. b. " Serapio primus de Senna mentionem fecit, deinde " Meſue." *Geoff.* ii. 267. Meſue obiit circa annum 865. Serapio floruit circa an. 890. " Serapion is placed by Haly after Meſue. . . . he refers to ſome " medicines made uſe of by Meſue, &c." *Freind. H.* ii. 41. But Meſue, cap. de Colocynthide. f. 53. a. mentions Serapionis filius twice. Actuarius floruit circa 1280. *Vid. Actuar. Meth. Med.* l. 5. c. 8. p. 274. D. " Porro quod " Sene nominatur, & ipſe fructus quidam eſt, qui inde (Syria & Aegypto) " adportatur drachmæ pondo aſſumptum, citra noxam purgat, pituitam ac " bilem educit." This is all Actuarius has of it there.

SECT. II.

It is a ſtimulating and attenuating, ſafe and efficacious purging medicine; called a cholagogue and phlegmagogue; commended and much uſed both in chronic and acute diſeaſes, for the robuſt adults, as well as for the delicate and young, pregnant women not excepted. It is more cathartic, but leſs aſtringent, than rhubarb.

" *Officin.* Folia, tum quoque folliculi, ſed raro. *Vires.* Senna inter pur- " gantia uſitatiſſima eſt, aduſtos & ſeroſos humores, & hinc flavam bilem, " pituitamque ex capite, epate, liene, continuatoque uſu juncturis ſine noxa " ſat benigne educens. Excitat tamen nonnunquam tormina, id quod ex " abundantia pituitæ vitreæ, ſeu mucilaginis acris evenire nonnulli volunt. " Verum rectius ſentire videntur, qui id crudiori, ac magis terreſtri ſenæ " particulæ, forti expreſſione prolecta, adſcribunt. Quia autem calida ac " ſicca 1. corrigitur flor. violarum, borraginis, prun. & quo minus ventriculo " obeſſe poſſit, additur cinnam. galang. zinzib. &c. Exhiberi poteſt omni " ætate, & vel ipſis prægnantibus. Doſis in ſubſtantia a ʒß. ad ʒiß. in in- " fuſo a ʒiiß ad ʒß. *Præp.* 1. Pulvis Sennæ *Montag.* 2. Syrupus. 3. Sy- " rupus de pomis. *Reg. Sab.* 4. Electuarium *Diabelzemer.* 5. Paſſulæ laxa- " tivæ. 6. Extractum. 7. Tinctura." *Schrod.* p. 774.

For 1. It is of a ſubviſcid nauſeous bitteriſh taſte, and not diſagreeable ſmell. " Folia ſunt guſtus nonnihil viſcidi & amari, non ſine nauſea aliqua." *J. B. R. H.* " Folia ſaporis glutinoſi, leviter amaricantis, non ſine nauſea aliqua." *Geoff.* ii. 267. " It ought to be of a pleaſant freſh ſcent." *Mill. Bot.* 409. " Of a ſomewhat gratetul ſmell, and a ſubacrid, bitteriſh, nauſeous taſte." *Lewis Pharm.* 64. " Saporis ſubacris, amaricantis, nauſeoſi quodammodo." *Boecler. in Herm. Cyn.* 535.—2. Foliorum thea is of a deep yellow colour, ſomewhat thickiſh and muddy, taſting as above.—3. It yields its virtues ſoon and eaſily to water, which it impregnates only to a certain degree. According to Mr. Geoffroy, *Mem. Acad.* 1738. pulv. fol. ſenæ ʒi. will yield extracti ℈i. with water. " Fol. ſennæ ʒij. will impregnate aquæ ℥iv. as ſtrongly, as " if twice the quantity were infuſed, becauſe the water will bear no more of " the purgative parts of that body." Vid. *Grew*'s experiments upon the ſolution of ſalts, read before the *R. S.* 18 *Jan.* $167\frac{6}{7}$, annexed to his anatomy of plants. Hence perhaps the reaſon why infuſions commonly are reckoned much weaker than the ſubſtance, and the doſe doubled in them (vid. rhabarbarum) viz. becauſe a ſufficient quantity of the menſtruum is not taken. But that aqua ℥iv. will extract all the cathartic virtue of ſennæ ʒij, I cannot ſay:

there is reaſon to believe it will not. Here the ſena is to the water as 1 to 16. but in ptiſana cathartica for ſennæ, glycyr. & coriandri āā ℈i. aquæ ℥vj. vel viij. are ordered in *Pharm. Bateana*; and yet the author ſays, "Mirum eſt "quam delicatule operabitur. Quinquies aut ſexies movere raro fallit." And I always think ſenæ ʒi. enough for aquæ ℥iv. and not too little for aquæ ℥viij, for perſons of age.—4. It ſeldom operates downwards under two, ſometimes four hours and more after it is taken; and commonly with troubleſome gripings of the guts. Theſe gripes ſome attribute to one cauſe, ſome to another. Vid. *Schrod.* "Torſionibus ſæpe moleſtat, non quod flatulenta ſit, "ſed quod firmiter hærentes humores, ac plerumque acres, nequeunt ſine "ſenſu doloris evelli." *Geoff.* ii. 269. Though its flatulency is more eaſily deducible from his analyſis, than its duo ſalium genera, ammoniacale unum, & tartareum alterum; though the uneaſineſſes it cauſes are very like flatulent gripes, and go off the ſame way; and though every other cathartic does not occaſion ſuch torſiones; yet certainly they are owing to its irritation, and the conſequent ſpaſmodic contractions in the guts; but not to the pulling or tugging away by force the firmly adhering humours. However, whatever is the cauſe of theſe tormina, they are always ſafe, and their effects ſalutary; as contributing conſiderably to the action of the medicine on the viſcera, yea on all the body, as deobſtruent, as well as cathartic, for they ſometimes put all the body into a ſweat. Theſe gripes attack only about the beginning, or during the height of the operation, and ceaſe after it: ſo that they no ways reſemble the borborigmi occaſioned by the purging ſalts.—5. "Analyſi chy-"mica foliorum ſennæ ℥lxviij. (or ℔iv. ℥iv.) exhibuerunt liquoris alcalini "urinoſi ℥xv, acidi vero humoris ℥ix. circiter, qui quidem promiſcui pro-"dierunt ex retorta, olei craſſioris ℥vi. ʒj. gr. xij, ſalis volatilis urinoſi ʒj, "carbonis ℥xviij. ʒvijß. Unde cinerum ℥ivß. ac inde ſalis fixi mere alcali "ʒj. gr. lvj," ſecundum *Geoff.* ii. 268. Hence there remained of earth ℥iij. ʒiij. gr. xvi. and the ſum of the products being ℥xlix. ʒj. gr. xlviij, it wants of ſixty-eight ounces. ℥xviij. ʒvi. gr. xxiv. which ſeems to be too large a loſs. But if ſo much was really diſſipated, or nothing but air, there is no wonder that it be flatulent. "Ex hac analyſi liquet ſennam conſtare ex duobus ſalium "generibus, ammoniacali uno, & tartareo altero; oleo craſſiori copioſo ſimul "junctis; unde compoſitum exurgit, gummoſo-reſinoſum, a quo purgandi fa-"cultas pendet. Ex ſenna enim ope aquæ extractum educitur, quod acrimonia "ſorti pollet, & exſiccatum facile accenditur." *Geoff.* l. c. "Revera cum "ſennæ vis purgatrix a ſubſtantia gummea & reſinoſa pendeat, quæ duplici "modo actionem ſuam exerit, tum humores ſpiſſos ac lentos ſolvendo, tum "etiam & præcipue nerveas inteſtinorum fibras irritando & ad contractionem "ſolicitando, quo minus hæc reſina extenditur, eo magis partibus adhæret, "eaſque vividius lancinat & irritat: quo magis extenditur, eo minor eſt ejus "adhærentia, eo minor irritatio. &c." *Ibid.* p. 269. So that, according to him, the partes reſinoſa & gummoſa, though both amicably diſſolve in water, ſeparate in the guts, &c. But this is of a piece with his other reaſonings: he aſſumes what cannot be granted, and draws concluſions which will not follow.

Some make it purge one humour, ſome another, others every humour. "Blandum, polychreſtum & catholicum purgans eſt, humores quoſvis mo-

" vens, & per alvum blande educens. . . In gummoſitate autem potior vis " conſiſtere videtur." *Herman. Cyn.* p. 534.

SECT. III.

It may be given in ſubſtance to ʒij, in infuſion to ʒß. But the infuſion ʒj, in aquæ (vel vini) ℥viij, will purge almoſt any perſon tolerably well. Fixed ſalts rather weaken than correct it, and alter its nature much; the carminative ſeeds, nutmeg, or the like aromatics, do better; acids, as tartar, prunes, &c. alſo betonica aquatica, and tea, improve its taſte, and manna its operation. It is an ingredient in electuarium lenitivum, tinctura cephalica purgans, elixir ſalutis, decoctum tamarindorum, infuſum amarum cum ſenna, infuſum ſennæ, ſyrupus de ſenna & rheo, pulvis diaſenna, & pilulæ ſtomachicæ.

" Obſervandum eſt ſennam valde nocere iis morbis in quibus humores æſtu- " ant, & ſolidæ partes inflammantur. Ab ea igitur abſtinendum in hæmor- " rhagiis, inflammationibus quibuſcunque, & in morbis pectoris. His dem- " ptis, nullum fere eſt morbi genus, ubi, ſervatis artis legibus, convenire " non poſſit." *Geoff.* ii. 270. A needleſs caution! for in all theſe I have known it do ſervice. " In ipſis etiam febribus continuis, & ardentibus, teſte " Wedelio, uſurpari poteſt." *Boecler. in Cyn. Herm.* p. 535.

SERPYLLUM.

SECT. I.

Serpyllum. *offic.* Serpillum vulgare, minus. *B. P.* 220. *Park.* 8. *T.* 197. Serpyllum vulgare. *Dod.* 277. *Ger.* 570. *J. B.* iii. 269. *R. H.* 521. *Syn.* 230. *H. Ox.* iii. 403. Serpillum. *Cæſ.* 465. *Lob.* 230. Serpillum minus, flore purpureo. *Tab. Ic.* 362. (Serpillum ſcribit etiam *Ger.* & *Park.* ut & *T.* & *B. J.* ac forte rectius.) Thymus repens, foliis planis, floribus verticillato-ſpicatis. *H. Cliff.* p. 306. Common Wild-Thyme, or Mother-of-Thyme.

It grows in all our hilly and dry paſtures and heaths, flowering all the ſummer over. The herb is uſed. This is the moſt uſual ſpecies. But the New London Pharm. has thrown it out; and taken in its place the Serpyllum, foliis citri odore. *B. P.* 220. *T.* 197. Serpillum citratum. *Ger.* 573. *Park.* 6. *R. H.* 522. *Syn.* 231. Lemon-Thyme; by the name of Thymi citratifolia. Why is it called Thymus? Where and how is it uſed? Why the folia only? Is it ſpecifically different from the common?

" Serpyllum a ſerpendo putant dictum: quod in ſylveſtri evenit, in petris " maxime. Sativum non ſerpit, & ad palmi altitudinem increſcit. Pinguius " voluntarium, & candidioribus foliis ramiſque, adverſus ſerpentes efficax." *Plin.* l. 20. c. 22. p. 536. l. 43, with whom it is once ſerpillum, (but commonly ſerpyllum) viz. l. 14. c. 10. p. 350. l. 46. In the common editions of Virgil it is ſerpyllum; but a late learned critic corrects it ſerpullum. In Greek it is ἑρπυλλον, ab ἑρπω, ſerpo.—But this ſeems not to be the plant the antients called ſo. Vid. *Bod. in Theoph.* p. 692. ad 695.

" Serpyllum

" Serpyllum (ἕρπυλλος) eſt quoddam hortenſe, quod quidem odore ſamp-
" ſuchum imitatur, & in coronas addi ſolet: ita dictum a ſerpendo, quod
" radiciter quacunque ſui parte terram attingat. Habet autem folia & ramu-
" los origani, verum caloris candidioris, & è maceriis demiſſum, longius,
" latiuſque propagatur. Alterum ſylveſtre, quod etiam Zygis appellatur,
" minime ſerpit, at in altum aſſurgens ramulos edit tenues & ſurculoſos, fo-
" liis rutæ ſimilibus refertos, verum utcunque anguſtis, longioribus atque
" durioribus. Flores guſtanti acres, jucundi odoris: radix nullius uſus.
" Naſcitur in petris efficacius, magiſque excalfaciens, & ad medendi uſum
" aptius quam ſit hortenſe." *Dioſcor.* l. 3. c. 46. p. 191.

SECT. II.

It is a ſtimulating aromatic; called cephalic, ſtomachic and uterine; and is recommended for female obſtructions, green-ſickneſs, vapours, &c. But it is little uſed, except in baths and fomentations.

" Calfacit & ſiccat in princip. 3. Saporis acris; attenuat, aperit, cepha-
" lica, uterina, ac ſtomachica eſt; uſus præcipue in menſibus & urina cienda
" (balneo), in expuitione ſanguinis, ſpaſmo, &c. Extrinſecus arcit vigilias,
" cephalalgias, vertiginem. Ciet menſes (balneo). *Præpar.* Aqua ſtillat. ex
" planta cum floribus Junio collecta." *Schrod.* 682. from the antients chiefly. Antacidum, acre aromaticum, & uterinum, eſt in *Boer. Lib. de M. M.*

For 1. It is of an acrid, aromatic, bitteriſh taſte, and fragrant ſmell. " Folia
" ſapore acri & aromatico." *J. B.* " Odoris eſt grati, ſaporis calidi & acris."
Nucl. Belg. 272. " It is a little bitter, acrid, ſtyptic, odoriferous, and red-
" dens (aſſez) pretty much the blue paper. It ſeems to abound with a ſal
" volatile oleoſum aromaticum, not quite freed of the acid . . . ſo is cephalic,
" ſtomachic, and good for the vapours. It deſtroys that exploſive matter
" which cauſes convulſive motions." *T. H. pl.* p. 149.—2. It is alſo com-
mended for old coughs, vertigoes, lethargies, epilepſies, &c. According to *T.* l. c. it repleniſhes the blood with ſpirituous parts; it reſtores the functions of the primæ viæ; it removes obſtructions; and what not. " Boiled in wine
" and drank, it is good againſt wambling and gripings of the belly, ruptures,
" convulſions, and inflammations of the liver." *Ger.* 572. e *Dioſcor.* " Lo-
" quelam apoplectico poſtliminio reſtitutam, ſpiritu ſerpylli vidimus *D. Soame*
" *e Dolæo.*" *R. H.* " The diſtilled oil is good for the tooth-ach." *Miller Bot.* 411.

SOLDANELLA.

SECT. I.

Soldanella, Braſſica maritima. *offic.* Soldanella maritima minor. *B. P.* 295. Soldanella. *Dod.* 395. Soldanella marina. *Ger.* 838. *R. H.* 726. Soldanella (vulgaris. *Park.* 168. ſive) volubilis marina. *Park.* 167. Braſſica marina, ſive Soldanella. *J. B.* ii. 166. Convolvulus maritimus, noſtras, rotundifolius. *H. Ox.* ii. 11. *T.* 83. Convolvulus maritimus, Soldanella dictus. *R. Syn.* 276.

Convolvulus foliis reniformibus. *H. Cliff.* 67. Sea-Bindweed, Sea-Withwinde, Sea-bells, Sea-coale, Sea-folefoot, Scottiſh Scurvy-graſs. *Ger.* Sea-cabbage. *Miller Bot.* 92. becauſe perhaps Mr. Ray ſays it is improperly by ſome called Sea-colewort.

" It grows upon the ſea-beach, in many parts of the North of England; " and flowers in June." *Miller Bot.* Alſo in Holland, France, Italy. The herb is uſed, but very ſeldom. " *Offic.* Herba, ſeu folia." *Schrod.* 775. " Folia." *Ph. Edinb.* " Herba." *Dale* 183. Soldanella is ſaid to be of Arabic original. It is generally believed to be the κραμβη θαλασσια *Dioſcoridis.*

" Quæ braſſica marina (θαλασσια κραμβη) dicitur, a ſativa prorſum diffi- " det: quippe quæ folia ferat multa ac tenuia, ariſtolochiæ rotundæ ſimilia. " Horum vero ſingula a ramulis rubentibus exeunt, ſingulari velut hedera, " pediculo. Porro albo prædita eſt ſucco, ſed minime copioſo. Guſtu autem " eſt utcunque ſalſo, & quadantenus amaro; pingui vero compage. Tota " porro herba ſtomacho inimica & acris eſt, alvumque vehementiſſime ſolvit, " ſi cocta edatur. Sed propter acrimoniam, nonnulli pingues carnes una cum " ipſa concoquunt." *Dioſcorid.* l. 2. c. 148. p. 138.

SECT. II.

It is a violent cathartic; called a hydragogue; and commended in the dropſy, ſcurvy, and rheumatic caſes; but it is reckoned hurtful to the ſtomach, and the doſe uncertain: therefore it is little uſed any where, and never here.

" Calfacit & ſiccat 3. Aquam valide educit, adeoque confert in hydrope, " ſcorbuto, &c. corrigitur cum ſtomachicis, zinzibere, mace, cinnamomo, " ſem. aniſi, &c. Doſis in ſubſtantia a ʒß. ad ʒj. *Præpar.* Succus inſpiſſa- " tus." *Schrod.* 775. Acre aromaticum eſt in *Boer. Lib. de M. M.*

1. It is of a ſaltiſh and bitteriſh taſte, and without ſmell. " Guſtu eſt ſalſo " ſubamaro." *J. B.* " Saporis eſt amari, ſalini & acris." *Nucl. Belg.* 275.— 2. It is a ſpecies of the Convolvulus, containing a proper milky juice, in which its virtues are lodged; and as it cannot be eaſily (if at all) determined, what proportion this juice bears to its other principles; neither what is its ſtrength, if collected by itſelf (while, according to circumſtances, it may contain more or leſs of it) ſo the doſe muſt be uncertain. Hence we find that ſome make the doſe in ſubſtance, or powder, ʒj. others ʒij. others ʒiv. In decoction ſome give it ℥ß. others to ℥j. Vid. *Hoffman.* p. 74. *Nucl. Belg. R. H.* Hence alſo ſome commend it in the dropſy, as Fallopius, Maſſaria, Helidæus; others ſay even there it is hurtful, as Dod. Lob. Adv. Attomarus. And at its beſt it cannot be ſo good as, at leaſt better than, jalap or ſcammony. " The whole herb is in uſe, and, as it is excellently calculated for diſcharging " water, it contributes very much to the cure of dropſies and ſcurvies." *James Diſp.* 260. This is his own.

STOECHAS.

SECT. I.

Stœchas, Stœchas Arabica. *Offic.* Stœchas purpurea. *B. P.* 216. *T.* 201. Stœchas. *Dod.* 275. *Lob.* 234. Stœchas Arabica vulgo dicta. *J. B.* iii. 177. *R. H.* 514. Stœchas brevioribus ligulis. *Cluſ. H.* 344. *H. Ox.* iii. 353. Stœchas, ſive Spica hortulana. *Ger.* 585. Stœchas vulgaris. *Park.* 67. Spica Italica. *Cæſ.* 459. Lavendula foliis lanceolato-linearibus, ſpica comoſa. *H. Cliff.* 303. French-Lavender.

It grows in plenty about Montpelier; alſo in Spain, Italy, &c. as well as in the Inſulæ Stœchades, now called the *Iſles d'Yeres* or *Hieres*, on the coaſt of *Provence*, whence it is named. In our gardens it flowers in June. The flower-ſpikes are uſed. "This beautiful ſhrub is planted with us in gardens, "where it is eaſily increaſed, and bears our ſevereſt winters with moderate "ſhelter; and pity it is that it is not more propagated, the freſh heads being "certainly of greater virtue and efficacy than thoſe which come from abroad, "there being not freſh importations in many years." *Miller Bot.* 425.

"Stœchas (στιχας) in inſulis Galliæ gignitur, quæ e regione Maſſiliæ ſitæ "ſtœchadas appellantur (καλεμεναις ταιχασιν) & ab iis quoque nomen acce-"pit. Herba eſt tenuibus ſurculis, coma thymi, ſed folio longiore, guſtu "acris, & aliquantum ſubamara; decoctum ejus, ſicuti hyſſopus, ad pectoris "vitia efficax eſt. Antidotis quoque utiliter immiſcetur." *Dioſc.* l. 3. c. 31. p. 186. "Stœchas in inſulis tantum ejuſdem nominis gignitur, odorata "herba, coma hyſſopi, amara guſtu. Menſes ciet potu: pectoris dolores le-"vat antidotis quoque miſcetur." *Plin.* l. 27. c. 12. p. 680. "Sunt qui "rectius ſtachyn, quaſi ſpicam dici exiſtimant." *B. P. Cordus* and others write it ſtichas.

SECT. II.

It is a ſtimulating aromatic and ſubaſtringent, or attenuating diaphoretic, agreeing much with lavender in virtues; called alexipharmac and cephalic; and commended chiefly in diſeaſes of the head and nerves. It is an ingredient in the mithridate & theriaca.

"Calfacit & ſiccat 2. abſtergit, attenuat. *Uſus præcip.* in affectibus capitis "& nervorum, ſcil. in vertigine, apoplexia, paralyſi. In morbis pectoris "itidem idem præſtat quod hyſſopus: inſuper urinam & menſes ciet. Ve-"nenis reſiſtit, affectibus hypochondriacis ſuccurrit: extrinſecus, in lotionibus "capitis, ſuffitu, &c. *Præpar.* Syrupus de ſtœchade ſimplex. 2. Syr. de "ſtœch. compos. 3. Syr. de S. Fernelii." *Schrod.* 688. Stimulans aroma-ticum eſt in *Boer. Lib. de M. M.*

1. It is of a ſubacrid, aromatic, bitteriſh taſte, and ſomewhat ſtrong ſcented. "Folia odore & ſapore aromatico." *J. B. R. H.* "Spicæ ſaporis ſunt ſub-"amari & calidi, odoris grati fere inſtar lavendulæ." *Nucl. Belg.* 279.—2. Summitatum thea is of a bitteriſh and camphorate-aromatic taſte, and not diſagreeable ſmell. It dilutes only ſyrup of violets, and reddens a little ſolutio heliotropii.

heliotropii. Solution of vitriol gives it a bluiſh-black colour; and precipitates a bluiſh-gray ſediment, leaving it tranſparent, and of a fine ſea-green above. —3. It much reſembles lavender, and may well be reckoned a ſpecies of it. —4. Meſue has the ſtœchas Arabica (which ſeems to be the ſame with ours) among the purgatives; ſays it purges atra bilis and pituita; and commends it for the vertigo, epilepſy, melancholy, arthritic pains, quartans, &c. but adds, "Calidis, ſiccis, bilioſis, præſertim quibus multa bilis flava in ventriculo re-"dundat, eſt noxia, quia turbat ventriculum, & ſitim, vomitum, ardorem "moleſtum, excitat." He owns it is a weak cathartic, and wants a ſtimulus; and concludes, "Potatur ejus decoctum ab ʒv. ad ʒvij, pulvis autem a ʒiij. "ad ʒv." Thus *Meſue de Simpl.* c. 13. fol. 38. a.

TANACETUM.

SECT. I.

Tanacetum, Athanaſia, Tanaſia, *Off.* Tanacetum vulgare, luteum. *B. P.* 132. *T.* 461. *H. Ox.* iii. 2. Tanacetum. *Dod.* 36. *Ger.* 650. *R. H.* 365. *Syn.* 188. Tanacetum vulgare, flore luteo. *J. B.* iii. 131. Tanacetum vulgare. *Park.* 80. *Par.* 482. Artemiſia Dioſcoridis. *Tab. Ic.* 10. Athanaſia, ſeu Tanacetum. *Lugd.* 955. Tanacetum foliis pinnatis, planis, pinnis ſerratis. *Fl. Lap.* 234. Tanacetum foliis pinnatis, pinnis pinnatifidis, inciſis, ſerratis. *H. Cliff.* 398. Common-Tanſy.

It grows in hilly places, in the borders of fields, and by way-ſides, flowering in July. The leaves, flowers, and ſeeds are uſed. "*Officin.* Herba cum "floribus, ſemen." *Schrod.* 691. "*Uſu* Folia." *Dale* 98. & *Ph. Lond. Nov.* "Folia, flores, ſemen." *Ph. Edinb.*

"Tanacetum, forte a Tannaco, quo nomine Parthenium appellatum fuiſſe. "*Plin.* l. 21. c. 30. teſtatur: Parthenion microphyllon forte *Hippocratis*, "Hermolao. Ἀρτεμισια λεπτοφυλλος *Dioſcor.* l. 3. c. 128. quibuſdam vide-"tur, nobis non item." *B. P.* It is Tamnacum, not Tannacum in *Pliny*.—Tanacetum forte ab Athanaſia.

SECT. II.

It is a ſtimulating and deterſive diuretic and deobſtruent; called carminative and uterine; and commended for flatulent and nephritic colics, dropſy, ague, worms, menſibus obſtructis, &c.

"Calfacit & ſiccat, incidit, diſcutit; vulnerarium, uterinum, & nephriti-"cum eſt. Uſus præcip. in lumbricis, torminibus ventris, calculo, impuri-"tateque renum ac veſicæ, menſibus obſtructis, flatibus, hydrope, &c. "Extrinſecus iiſdem affectibus adhiberi poteſt, lavando, cataplaſſando, &c. "Præp. 1. Aqua ſtillat. ex tota planta florente. 2. Oleum ſtillat. quod raro "proſtat." *Scrod.* 690. Acre ſtimulans aromaticum, & uterinum eſt, in *Boer. Lib. de M. M.*

1. It

1. It is of an acrid, aromatic, bitterish taste, and strongly fragrant smell. "Folia odore vehemente, sapore amaro. *J.B. R.H.* "Odoris est aromatici "fortis, saporis valde amari & calidi. Est aperitivum, stomachicum, carminativum, specifice anthelminticum, emmenagogum, diureticum, febrifugum, vulnerarium, detergens, & resolvens: potissimum utimur ejus floribus & seminibus." *Nucl. Belg.* 285. "Tansy is acrid, aromatic, bitter, "and does not redden the blue paper; the roots are insipid at first, then "astringent, but not bitter. This plant contains a sal. vol. ol. aromaticum, "loaded with much sulphur; for by a chymical analysis it gives much oil, a "considerable quantity of earth (assez de terre) a little urinous spirit, no volatile salt; so is stomachic, febrifuge, sudorific, vulnerary, deobstruent." *T. Hist.* p. 366.—2. It is commended externally for scurf, tetters, and other diseases of the skin; and inwardly for rheumatic pains, cachexy, green-sickness, malignant fevers, vertigo, epilepsy, &c. "The leaves provoke urine "and the catamenia: the good women give a syrup of the juice to prevent "miscarriage." *Miller Bot.* 432. "Sunt e mulierculis, quæ ad abortum "præcavendum, sæpe applicant partibus genitalibus tanacetum in manu calefactum." *Boecler. in Herm. Cynos.* p. 491. The Lapland women are wiser. "Fœminæ in Lapponia & Westrobothnia, ex hac planta conficiunt balnea "vaporis, pro emolliendis adpropriatis membris instante partu, atque pro eodem facilius excludendo." *Fl. Lap.* 234. Tansy cakes are reckoned wholesome, and good to correct the flatulency of a Lent diet. "Miles Monspelienſis, hydrope pertinaci laborans, ad sanitatem restitutus erat solo decocto "tanaceti." *Ephem. Germ.* an. 12. obs. 112. *R.H.* In a word it agrees much with matricaria & abrotonum.

SECT. III.

It may, in conserve, juice, or infusion, be given to ounces; in powder to drachms. The flowers are in the pulvis vermifugus.

THEA.

SECT. I.

Thea, The. *offic.* Chaa herba in Japonia. *B.P.* 147. Chaa herba Japoniæ. *J. B.* iii. 2. 5. The Sinensium, sive Tsia Japonensibus. *Breyn. Cent.* p. 111. *R.H.* 1619. Euonymo affinis, arbor orientalis, nucifera, flore roseo. *Pluken Phyt.* l. 88. *Alm.* 139. Thee Chinensium, sive Tschia Japonensium. *Hort. Amstel.* 346. Thea frutex folio cerasi; flore rosæ sylvestris; fructu unicocco, bicocco, & ut plurimum tricocco. *Kæmpf. Amæn. Exot.* p. 605. Thea Kæmpferi. *Gen. Pl.* 233. *H. Cliff.* 204. Thea, *offic. Dale* 321. The, Thee, or Tea-Plant.

It grows in China and Japan. The best description and figure of the plant, that I have seen, is in Kæmpfer. How it is cured, and the different sorts of it, see in *R.H.* and *Savary's D.C.* 2 col. 1755. It is generally believed that the

difference of teas is owing only to the ſoil, expoſition, time of gathering, and manner of curing the leaves of the ſame tree; though ſome of late, I hear, aſſert that the plant which affords the green tea is not the ſame with that which affords the bohea tea. The leaves are uſed.

" Mirum autem tantum (theæ fruticem) ad nos nondum perveniſſe, cum " jam a quadraginta & amplius annis, nempe anno 1687, hujus arbuſculas " ſedecim ex Japonia, per Georgium Meiſterum, miſerit in hortum Promon- " torii bonæ ſpei Andreas Clyerus, ut teſtatur Meiſterus in tractatu, quem " de itinere ſuo, & plantis in Japonia & Java majori viſis conſcripſit lingua " Germanica, p. 227." *Hort. Eltham.* p. 392. " Semina ſepties, per aliquot " annos, in hortum tranſlata fuere, regerminarunt vero nulla: nec ſcio ullum " hortum in quo creverit Europæum. Siquidem ſemina, teſte Kæmpfero, " ipſo in loco natali, citiſſime ranciſcant, cum maxime oleoſa ſint; adeoque " vix ſingulum enaſcitur, longe itaque magis, dum bis meridiem ſubire debeant " antequam in Europam perveniant: nec ſperat Kæmpferus plantas vivas e " Japonia per æſtuoſam Indiam deferri poſſe facile in Europam, quin tabe " perirent ſub itinere." *Hort. Cliff.* p. 204.

How long Tea has been drunk in the Eaſt, and who firſt diſcovered it, I cannot find; but Kæmpfer relates the following Chineſe fable concerning its invention: " Darma, third ſon of Kosjuwo, king of India, a religious high- " prieſt, and the twenty-eighth papa from Siaka (the author of that eaſtern " paganiſm, ante Chriſtum natum 1028 years) coming to China an. Dom. " 519. to teach the knowledge of the Supreme Being, and the way to happi- " neſs, lived a moſt auſtere life, ſub dio exigendo vitam, affligendo corpus, " & affectus varie domando, ſatagebat ſibi divinam conciliare gratiam, folio- " rum victitabat eſu, & in perpetuo ſatori (i. e contemplatione) Summi Nu- " minis, noctes ducebat pervigil & inſomnis. After ſeveral years faſting, " watching, &c. it happened, contrary to his vows, that Darma fell aſleep. " When he awaked, he was ſo enraged at himſelf, that, to prevent the like " for the future, he cut off both his eyelids, and threw them on the ground. " Poſtridie in locum ſupplicii reverſus, videt ex ſingulis palpebris, admiranda " transformatione, natam arbuſculam, Theam viz. quam antea orbis vel non " habebat, vel certe ejus virtutem ignoraverat. And upon eating of its leaves, " miram perſentit animi lætitiam & vigorem vacandi divinis contemplationi- " bus; with which he acquainted his diſciples: and thus, in vulgum receptus " eſt nobiliſſimæ ſtirpis uſus nunquam ſatis dilaudandus." Vid. *Kæmp. Amæ. Exot.* p. 608.

SECT. II.

The leaves are ſubaſtringent, and narcotic; but the infuſion, partaking more of the virtues of the warm water, ſugar, and milk, than of the tea, is diluent, antacrid, and anthypnotic.—It is ſaid to be cephalic and analeptic; and is commended in lethargic diſeaſes, comatous fevers, headaches, eſpecially after drinking, gravel, gout, &c. though hurtful to weak, lax, delicate conſtitutions, cauſing tremblings and ſhakings of the head and hands, loſs of appetite, vapours, and other nervous diſeaſes, if much uſed.

" Theæ

" Theæ vis in ſale volatili blando, potius quam fixo, conſiſtit, quod acida " quævis diſſolvit, & per urinam educit; unde in cruditatibus mali hypo- " chondriaci, podagra, arthritide, & nephritide, mire conducit; ſpiritus valde " auget & confortat, eoſque in continua agitatione conſervat, proinde etiam " cephalicum audit, & in confortanda memoria, arcendo ſomno & inducendis " vigiliis elegans remedium eſt. A Chinenſibus laudatur in comate tam ſom- " nolento quam vigili." *Herm. Cyn.* p. 500. " Siccat & leviter aſtringit, " acida diſſolvit & per urinam educit; hinc prodeſt in hypochondriaco affectu, " podagra, arthritide, & nephritico; cephalalgiam arcet, memoriam confortat, " ſanguinem purificat, &c. Bohea duntaxat ſanativa & balſamica habetur, " naturæ languentis reſtauratrix, & adverſus phthiſin & tabem prophylactica." *Dale* 321. " Adſtringit & roborat; vim habet diureticam & vulnerariam; " valet ad affectus capitis, ſcilicet ſoporem & dolorem, præcipue ab ebrietate " inductum." *Nucl. Belg.* 290.

1. Tea is of a bitteriſh, ſubaſtringent, and ſomewhat aromatic taſte, and mild not unpleaſant ſmell. " Folia ſunt ſaporis exſiccantis, cum quadam " amaritudine. . . Foliorum vero bonitas in grata fragrantia (proxime autem " ad fœni accedentis *(pro* recentis) odorem, tantiſper aromaticum accedit) " colore viridi, ſapore ſubamarè dulci." *R. H.* 1620. " Saporis eſt ſubamari, " & ſubauſteri; odoris violacei." *Nucl. Belg.* 290. And green vitriol turns the infuſion black like ink. Hence it might be numbred among the ſub- aſtringent vulneraries, and mild antiſcorbutics, ſuch as agrimony, &c. did not its effects diſcover a very different quality in it. For—2. The infuſion (eſpecially to ſuch as are not much accuſtomed to it) hinders or prevents ſleeping, more than the ſame quantity of a thin watry fluid, ſuch as warm water with ſugar and milk, can do. But—3. It alſo remarkably affects the nerves. " Foliis " maligna quædam vis, & inimica cerebro qualitas ineſt, qua ſpiritus animales " turbando, mentem inebriat, & tremulum inducit nervorum motum: quæ " vero aſſiduo frigendo, egregie corrigitur, ita ut eliminata narcoſi, blanda " remaneat animales ſpiritus refocillandi efficacia." *Kæmpf. Amæ.* p. 611. who elſewhere owns, that this narcotic quality is not quite driven away even by the frying or toaſting uſed in curing it. " Torrendo enim non modo folia ex- " ſiccantur, verum etiam caſtrantur maligna ſua & inimica cerebro qualitate, " ut in uſum humanum mitigentur. . . . Nota morem obtinere in Sina potiſſi- " mum, ut folia primæ collectionis, ante uſtionem, bullienti aquæ immer- " gantur per dimidium temporis minutum, quo facultas narcotica, qua maxime " ſcatent folia magis ſuccoſa recens nata, duplici correctione eliciatur. . . Ra- " tione virtutis qua Thea pollet dictum quod inebriandi & ſpiritus animales " turbandi facultate polleat, quæ uſtione expelli debeat: non poteſt autem " ita ſufficienter debellari, ne remaneat quædam cerebro inimica qualitas, " ſed quæ ſua miteſcit ſponte, viz. mora decem pluriumve menſium. His " elapſis tantum abeſt ut ſpiritus turbet, ut potius blande excitet, & eorum " organa demulceat, adeoque exhilarandi præſtet efficaciam. Intra annum " ſorbillata delicatiſſime ſapit quidem, ſed turbat, copioſe aſſumpta, mentem " & tremorem inducit articulis. Optima delicatiſſima, & maxime exhila- " rans eſt, quæ unius anni ætatem habet: recentiorem Japonum nemo bibit, " niſi mitigatam admixta æquali portione Theæ vetuſtioris. . . . Omnis Theæ " potus ſupprimit medicamentorum efficaciam." Cætera vide apud Kæmp-

ferum; againſt whoſe teſtimony nothing can be excepted, ſince he was evidently no enemy to this kind of liquor.—That ſomewhat of its narcotic quality remains, even after it is brought to us, I have ſeveral times found to my own experience; though it muſt be owned, that many have indulged themſelves in a pretty liberal uſe of this drink for many years, without any prejudice from it. But the ſame may be ſaid of opium. And it is as certain that not a few have been hurt by it. "Hunc potum quibuſdam nocuiſſe videtur "experimento ſæpius probatum: inter alia hoc patet ſequenti hiſtoria. Mu- "lier vegeta & ſana potui Theæ addicta, conqueritur de frigore acri interiora "concutiente, præſertim noctu, quod a Theæ potu derivandum putat hanc "ob cauſam, quia eo potiſſimum corripitur ubi huic potui indulſit. Memini "ante aliquot annos, virum robuſtum conqueſtum eſſe de frigore acri in ab- "domine, quod etiam potui Theæ, quem quotidie ſumebat, imputat." *Ex Ant. de Heyde.* obſ. 76. communicavit *D. Hulſe.* Vid. *R. H.* 1620. "In India "quoque obſervavit Herm. Nicol. Grimmius, immoderatos Theæ potatores "in diabetem & marcorem delapſos. Ipſe tandem nonnullos ab ejus nimia "ingurgitatione, inſomniis, vertigine, & ſpaſmodicis membrorum ſubſultibus "affectos fuiſſe plus ſemel obſervavi." *Geoff.* ii. 280. It is not without reaſon believed by ſome, that the frequency of nervous diſeaſes in Britain, and the conſequent dram-drinking, is much owing to the too cuſtomary and frequent uſe of this liquor. "I have known many hyſterical caſes relieved, and ſome "cured, by leaving off Tea, without taking any remedy whatever; and one "in particular, which was attended with terrible convulſions." *James Diſp.* 455. What effect would an Extractum Theæ have on dogs?—4. However extravagantly it is ſaid to be commended by the Chineſe (Vid. *R. H.* 1620.) yet their phyſicians, ſuch as they are, own exceſs in it to be hurtful. "Theæ "potum qui toto die biberet fortiter extractum, eum vitæ ſuæ, quæ in calido "humidoque reſidet, radicale fomentum deſtruere aſſerunt medici Sinenſes." *Kæmpf.* l. c. who ſays alſo, "Virtutes paucis comprehenduntur, ſi quis dicat, "Theæ liquorem obſtructiones viſcerum reſerare, defæcare ſanguinem, præ- "ſertim vero eluere tartaream calculi materiem." If Tea keeps the Japaneſe from the ſtone, it has not that effect here; as I could prove by many inſtances. —In a word, all the beneficial qualities of Tea are owing to the warm water, ſugar, and milk. Its aſtringency is of little conſequence, thus diluted: where this property is wanted Tea is rather hurtful.

"Blanda donatur adſtrictione, odorem ſubtilem & pergratum exhalat, unde "concludere licet conſtare ex mediocri ſalis volatilis oleoſi portione cum terra "aſtringente conjuncti. Sua adſtrictione ventriculum roborat, & impedit quo "minus largior aquæ calidæ potus ventriculi fibras nimis laxet. Eadem ad- "ſtrictione viſcerum obſtructiones reſerat, modo tenaciores non ſint, eorum "nempe fibrarum tonum & oſcillationem reſtituendo. . . Partibus vero actuo- "ſis & volatilibus ſanguinem rariorem efficit, lympham paulo ſpiſſiorem atte- "nuat & ſolvit: ſic diureſim vel tranſpirationem promovet, capitis dolorem "ſedat, ſomnum arcet, &c." *Geoff.* ii. 279.

"Catalogum authorum qui de hoc frutice ſcripſerunt vide apud *Jac. Breynium*, Exot. Centur. 1. cap. 52. quibus adde *D. Pechlin*, Belgæ, Tractatum "de Thea 1684 editum, *M. du Four*, Hiſtoriam Theæ, Lugd. impreſ. 1685. "& Tractatum quendam Anglice conſcriptum Londini 1682. Verum omni-

"bus

" bus quæ de Thea ſcriptæ ab aliis ſunt obſervationes *D. Wilhelmiten Rhyne*, " magni imperatoris Japoniæ medici, præferendas cenſemus, quæ apud Jac. " Breynium habentur in appendice ad Exot. Cent. 1." *R. H.* 1619. But *R. H.* and *Kæmpfer.* Amæn. Exot. Faſc. 3. p. 605. &c. may ſerve for all.

THYMUS.

SECT. I.

Thymus. *off.* Thymus vulgaris, folio tenuiore. *B. P.* 219. *T.* 196. Thymum durius. *Dod.* 276. *Ger.* 573. *R. H.* 521. T. durius, vulgare. *Park.* 7. T. vulgare durius. *H. Ox.* iii. 401. T. vulgare, rigidius, folio cinereo. *J. B.* iii. 263. Thymus, erectus, foliis margine reflexis, ovatis; floribus verticillato-ſpicatis. *H. Cliff.* 305. Common Garden-Thyme, or Muſk-Thyme.

It grows wild in Languedoc, Spain, Italy, &c. In our gardens it flowers in July. The leaves and tops are uſed. " *Officin.* Herba ſeu folia & ſemen." *Schrod.* 692. " Uſu herba." *Dale* 143. *Ph. Edinb.*. " The whole plant is " uſed." *Miller Bot.* 437. " Θυμος *Dioſcor.* l. 3. c. 44. (p. 190.) & *Theoph.* 4. hiſt. 7. & 6. hiſt. 2. 1. cauſ. 5. ἀπο τȣ Θυμȣ, quod iis qui animi deliquium " patiuntur adhibeatur: alii ἀπο της Θυμασεος και της Θυης deducunt, quod " hoc veteres in ſacris, quæ igne accenſo fiebant, primum uſi ſint, ut apud " Rhodiginum, l. 3. c. 23. legere eſt. Dioſcorides, l. c. capitatum (i. e. T. " capitatus, qui Dioſcoridis *B. P.*) deſcripſit. At. l. 4. c. 179. (de Epithymo) " Thymi durioris meminit. Ex Theoph. 6. h. 2. duo genera, *Plin.* l. 21. c. 10. " & 21. candidum & nigricans propoſuit." *B. P.* 219.

SECT. II.

It is an acrid aromatic, and ſo an attenuating diaphoretic; called cephalic, pectoral, ſtomachic, uterine, carminative, and alexipharmic; and internally recommended in the palſy, aſthma, anorrhexy, windy colics, hard labour, gout, &c. and externally as anodyne and diſcutient. It is ſtronger than ſerpillum; but, however uſeful, little uſed except in the kitchens. " Eſt deni- " que pro condimento ad ſanorum uſus perquam utile." *Dioſcor.* l. 3. c. 44. p. 191.

" Calfacit & ſiccat 3. Saporis ſubacris; attenuat, incidit, diſcutit; uſus " præcip. in affectibus tartareis. 1. Pulmonum, ut aſthmate, tuſſi 2. artuum, " ut podagra; omnia viſcera referat, appetitum excitat. Extrinſecus in tu- " moribus frigidis, ſugillationibus, inflationibus ventris, doloribus arthriticis. " *Præp.* 1. Aqua, ex herba cum floribus. 2. Spiritus. 3. Oleum." *Schrod.* 692. Antacidum, attenuans; acre aromaticum & uterinum eſt, in *Boerh. Lib. de M. M.*

It is of a warm bitteriſh aromatic taſte, and very fragrant ſmell; pleaſant to ſome, though to others it gives the head-ach. " Odoris eſt jucundi, ſa- " poris acris." *J. B.* " Thymus eſt planta hic notiſſima, odoris valde aro- " matici, quandoque caryophyllos, quandoque citrum redolet; ſaporis eſt " calidi

" calidi & aromatici." *Nucl. Belg.* 293. Hence it ſeems not to be well known to the authors who have wrote on it. " Noſtratibus uſurpatur pro olere, & " juſculis incoqui ſolet: calore ſuo ventriculum refocillat, & concoctionem " promovet." *R. H.*

TILIA.

SECT. I.

Tilia. *offic.* Tilia fœmina, folio majore. *B. P.* 426. *T.* 611. Tilia. *Dod.* 838. Tilia fœmina. *Lob.* 606. *Ger.* 1483. Tilia fœmina major. *Park.* 1406. Tilia vulgaris platyphyllos. *J. B.* 1. ii. 133. *R. H.* 1694. *Syn.* 473. Tilia. *Lin. G. Pl.* 232. *H. Cliff.* 204. The Common Lime, Line, or Linden-Tree.

It grows wild in Sweden, Denmark, Germany, &c. But I doubt its being a native of Britain. It flowers in May and June. *R. H.* in June. *Dale* 330. in July. *Miller Bot.* 438. The flowers are uſed. " *Officin.* Flores, folia, cortex, ſemen, lignum." *Schrod.* 693. " Cortex, folia, flores." *Phar. Lond.* edit. 1721. " Folia & flores. *Dale.* " We ſeldom uſe any thing but the " flowers." *Miller Bot.* " Flores." *Pharm. Edinb. & Lond. novæ.* I find it not in Hippocrates, Dioſcorides, Galen; nor any of the Greeks, except Theophraſtus, " qui luculenter Tiliam deſcribit." *Bod. in Theoph.* p. 179.

" Tilia. *Theoph.* 3. hiſt. 10. (p. 160.) φιλυρα dicitur, quod in tenues aſſulas " ſive philyras diſcerpatur: & inter corticem & lignum, aliæ tenues interiores " cortices ſunt, & veluti membranæ, a quibus aliarum quoque arborum cor- " tices interiores, Tiliæ & Philyræ vocantur, quod ex *Plinio* l. 16. c. 14. & l. 24. c. 8. colligere eſt. . . . Mirum profecto quod *Plinius* l. 17. c. 16. ſcri- " bit, Tiliam juxta Tiburtes conſpici omni genere pomorum onuſtam, alio " ramo nucibus, alio baccis, aliunde vite, ficis, pyris, punicis, malorumque " generibus, ſed cui vita brevis fuit." *B. P.* " Tilia, ſi Papiæ credimus, " quaſi Telia, quod lignum ejus ad telorum uſus ſit utile, ob levitatem ejus. " At Martinius ατιλον, penna, nempe ob foliola albicantia pennas referentia, " unde umbellatim floſculi effloreſcunt." *R. H.* 1694. " Sculptores ſimula- " chrorum ex hujus materia, omnia pene ſimulachra exculpunt. Levis enim " eſt, tenax, facile ſecatur, diu durat, nec teredini obnoxia eſt. Carbones " hujus omnium optimi ſunt pro pulvere pyrio conficiendo, item pro delinea- " tionibus pictoribus expetiti e cortice funes, & corbes, lagenæ & cunæ, ut " Theophraſtus, vel potius ciſtæ, aliaque vaſa texuntur." *R. H.* 1695.

SECT. II.

The flowers of this tree agree in virtues with the flores lilii convallium & paralyſis; being called cephalic; and are recommended in the vertigo, apoplexy, epilepſy, hyſteric fits, &c. They may be uſed any way. They were in the aqua pæoniæ compoſita *Pharm. Lond.* edit. 1721. but are ſeldom kept here.

" Flores

" Flores calfaciunt & ſiccant, partium tenuium, diſcutiunt, cephalici ſunt. " Uſus præcip. in epilepſia, apoplexia, vertigine. Folia ac cortex ſiccant, re- " pellunt, urinam ac menſes cient. Extrinſecus ambuſtis ſubveniunt (muci- " lago ſcil. extracta & inuncta) ſemen fluxionibus quibuſcunque medetur, " etiam hæmorrhagiæ narium (naribus ſcil. inditum) lignum in titiones aceti " aſperſione redactum, ſanguinem coagulatum fortiter reſolvit. Extrinſecus " adhibentur folia in aphthis ac tumoribus pedum diſcutiendis: corticis mu- " cilago in ambuſtis ac vulneribus magni eſt ſolaminis. N. humor defluens " e medulla diſſectæ Tiliæ capillorum defluvio ſuccurrit. *Præp.* 1. Aqua " ſtillat. ex floribus. 2. Conſerva, ex floribus." *Schrod.* 693. " Arbori " huic quoque haud raro innaſcitur viſcus, quem querno in affectibus epilep- " ticis quidam præferunt. De aqua florum Tiliæ notandum, quod tota pro- " deat mucilaginoſa, ſi ignis urgeatur." *Boecler. in Herm. Cynoſ.* p. 593.

1. The flowers are of a ſweetiſh, ſubviſcid taſte, and very pleaſant ſweet ſmell. " Liber eſt dulcis, flores ſuaveolentes, ſeminis nucleus dulcis." *J. B.* " Flores ſunt odoris leniter aromatici." *Nucl. Belg.* 293.—2. All the plant, but eſpecially the bark, contains a ſoft mucilage, void of all acrimony, ſo rather ſoftening than aſtringent or repellent, of uſe for the aphthæ, burnings, and wherever acrimony offends. " Baſiliæ & alibi pauperiores, adventante " hyeme, Tiliæ folia recondere ſolent, pro vaccarum & caprarum pabulo." *J. B.* If the folia viſci are good feed for cattle, they are probably of the ſame nature with the folia Tiliæ; and either may be ſerviceable in the epilepſy, if occaſioned by irritation. " By an infuſion of the flowers in water, after " the manner of tea, with long and conſtant uſe, I have known, ſays Hoff- " man, an inveterate epilepſy perfectly cured." *James's Diſpenſ.* p. 456.

LECTURE LXI.

TRIFOLIUM PALUSTRE.

SECT. I.

TRifolium paluſtre, Trifolium fibrinum, *off.* Trifolium paluſtre. *B. P.* 327. *Dod.* 580. *J. B.* ii. 389. *R. H.* 1099. Trifolium paludoſum. *Ger.* 1194. *Park.* 1212. Acopa Dioſcoridis. *H. Ox.* iii. 604. Menianthes paluſtre. *Lugd.* 1020. Trifoliata paludoſa. *H. Ox.* ii. 149. Menyanthes paluſtre, latifolium & triphyllum. *T.* 117. Menianthes paluſtre, triphyllum; latifolium, & anguſtifolium. *Inſt. R. H. R. Syn.* 285. Menyanthes foliis ternatis. *Fl. Lap.* 50. *H. Cliff.* 52. Marſh-Trefoil, or Buck-beans.

It is very common in all our boggy and marſhy grounds, flowering in May and June. The leaves are uſed. " Uſu herba." *Dale* 189. " The leaves " are uſed." *Miller Bot.* p. 441.

There is in *Theoph. hiſt.* l. 4. c. 11. p. 453. a μηνανθος, i. e. menſiflora, or, as others read it, μινυανθες, correcting the text by Dioſcorides, and ſuppoſing it to be a Trifolium, no where elſe mentioned by Theophraſtus. Vid. *Bod. in Theoph.* p. 455. 2. But the μηνυανθες Dioſcoridis is the ſame with the ἀσφαλ-

τιον, a very different plant from this, viz. Trifolium bitumen redolens. *B. P.* 327. or ſtinking Trefoil. " Trifolium (τριφυλλον) alii ὀξυφυλλον, alii μηνυανθες, " alii aſphaltium, alii denique Cnicium vocant. Frutex eſt ſupra cubiti alti- " tudinem aſſurgens, at virgas habens tenues, nigras, junceas, non ſine ramu- " lorum appendiculis, in quibus folia exeunt loti arboris foliorum ſimilitudine, " eaque terna in ſingulis germinibus. Odor illorum, ubi recens nata ſunt, " rutæ; poſtea quam vero adoleverunt, bitumini proximus, &c." *Dioſcorid.* l. 3. c. 123. p. 224. Vid. *Sar. Scholia.* p. 69.

SECT. II.

It is an attenuating antiſeptic, diaphoretic, diuretic, and laxative; ſaid to be ſtomachic; and is recommended in the ſcurvy, ſcrophulæ, dropſy, rheumatiſm, gout, agues, jaundice, diſeaſes of the ſkin, &c.

" Herba hæc Germanorum amaſia, nuperis annis, in magna exiſtimatione " eſſe cœpit. Nonnulli ad morbum articularem, alii ad ſcorbuticos affectus " ad febres intermittentes & catarrhos eam commendant, & in hydropicis " affectibus valde proficuum eſſe exiſtimant D. T. Robinſon." *R. Syn.* 285. Scorbuticum acrius eſt in *Boerh. Lib. de M. M.*

For 1. It is of a very bitter and diſagreeable taſte; and ſomewhat fetid ſmell, eſpecially when green. " Ingratiſſimi odoris & ſaporis eſt." *R. H.* " Tota " planta eſt amara." *Nucl. Belg.* 296. " Folia ſunt ſaporis acris admodum, " inſtar piperitidis, aut naſturtii, & amari; odoris olidi." *Boecler. Cynoſur. contin.* p. 420. Did he ever taſte it?—2. Analyſed, beſides ſome acid liquors, it yields ſome volatile ſalt, aſſez de terre, and much oil. It contains a ſal ammoniac involved in ſulphur and terreſtrial parts; ſo is proper for the ſcurvy, gout, cachexy, dropſy. In the paroxyſm of the gout, the patient ought to drink, every four hours, a glaſs of the decoction of this plant." *T. hiſt.* p. 494. —3. " D. Tanc. Robinſon ſe ſæpius obſervaſſe ait oves tabidas, in paludes " hac herba abundantes compulſas, ejus eſu ſanitati reſtitutas." *R. H. Linnæus* ſays that in Lapland they give the roots to their cattle, " in penuria fœni " & pabuli, quæ eaſdem conſumunt totas." And that the common people, in times of ſcarcity, make bread of theſe roots dried, with a little meal, which is " admodum amarus & deteſtabilis panis." Vid. *Fl. Lap.* p. 50.—4. It is much commended almoſt in every chronic diſeaſe. *Sim. Paulli* gives ſome inſtances of its extraordinary effects in the ſcurvy. Vid. *Quad. Bot.* (edit. 1667.) p. 156. *Tilingius de Trifolio fibrino, in Miſcel. A. N. cur.* De cur. 2. an. 2. obſ. 74. & *R. H.* I knew it have very remarkable effects in the gout, in keeping off the paroxyſms, though not to the patient's advantage.

It may be uſed any way: but does beſt in medicated wines, or ales, and by way of tea. Trif. paluſtre, rhapontium, & cort. aurantiorum, make a good herb-ale in the ſpring, eſpecially if a little ſenna be uſed with them.— N. B. " Its good effects in ſcorbutic and ſcrophulous diſeaſes have been war- " ranted by experience. Inveterate cutaneous diſeaſes have been removed, " by an infuſion of the leaves, drank to a quart a day, for ſome weeks." And Boerhaave relates, " that he was relieved of the gout by drinking the " juice mixed with whey." Thus *N. Diſp.* p. 221. *Where is this related?*

TUSSILAGO. *Vide Roots.*

VERBASCUM.

SECT. I.

Verbaſcum, Tapſus barbatus. *offic.* Verbaſcum mas, latifolium, luteum. *B. P.* 239. *T.* 146. *R. H.* 1094. *Syn.* 287. V. latius. *Dod.* 143. V. vulgare, flore luteo, magno; folio maximo. *J. B.* iii. 871. V. album, vulgare; ſive Tapſus barbatus communis. *Park.* 60. V. foliis incanis, mas, latifolium, floribus luteis, arcte caulibus adhærentibus, ſine foliis anguſtis inter flores emanantibus. *H. Ox.* ii. 485. Tapſus barbatus. *Ger.* 773. Verbaſcum caule ſimplici, ſuperne floribus ſeſſilibus clavato, foliis utrinque lanigeris. *H. Cliff.* 55. White-Mullein, High-taper, Cows-Lungwort. "It is commonly called Thapſus barbatus." *T. Hiſt.*

It grows in the borders of fields, banks of ditches, and ſometimes on walls and rubbiſh. *R.* "It grows in highways and by hedge ſides." *Miller's Bot.* 449. flowering in July the ſecond year. The leaves are uſed. "*Officin.* Fo-"lia, flores, radix, ſed raro." *Schrod.* 697. "In uſu ſunt folia, flores." *Dale* 189.

"Verbaſcum, φλομος *Dioſcoridi*, l. 4. c. 104. a φλεγω, uro, quaſi φλογος, "flamma, quia hujus pro elychniis uſus eſt." *B. P.* "Verbaſcum nonnullis "quaſi Barbaſcum dictum putatur, quia folia ejus piloſa ſunt: Italis enim "Barbaſſo, & prima ſpecies vulgo Tapſus barbatus dicitur. *Plinius* a Ver-"bena deducit. *Græcis* φλομος appellatur, απο της φλογος, a flamma, quod "ejus foliis & caulibus in laternis pro elychniis uterentur." *R. H.* It ſhould be Tapſus barbata. "Ericinaque Tapſos." *Lucan.*

"Phlomos quæ mas appellatur, albis eſt, oblongis, anguſtioribuſque (quam "fœmina) foliis, ac tenuiori quoque caule." *Dioſcorid.* l. 4. c. 104. p. 284. *Does this agree with our Verbaſcum?*

SECT. II.

It is emollient and anodyne; called pectoral; and commended internally for a cough, hæmoptoe, colic pains, hæmorrhoids, teneſmus, &c. and externally for tumors (eſpecially about the anus, procidentia ani, & uteri) contuſions, inflammations, pains, gout, ſore throat, &c.

"Calfacit moderate ac ſiccat, emollit, diſcutit, dolores lenit. *Uſus præcip.* "in morbis pectoris, tuſſi, expuitione ſanguinolenta, torminibus ventris. "N. radix hæmorrhoidum fluxum & dolorem ſiſtere dicitur (diebus 9. vel 10. "continuis aſſumpta.) Extrinſecus ſunt flores ac folia præcipuæ æſtimationis "in ſopiendis doloribus quibuſcunque, & imprimis in affectibus ac tumoribus "ani (hæmorrhoidibus) in capillis luteo colore tingendis. *Præpar.* 1. Aqua "ſtillat. ex floribus. 2. Oleum, ex infuſione iterata florum in ol. olivarum." *Schrod.* 697. Molle emolliens & leniens eſt in *Boerh. Lib. de M. M.*

1. It is of a ſoft, herbaceous, ſcarcely-rough taſte, and ſmells of elder. "Flores odore obſcuro, non ingrato." *J. B.* "The leaves are of an herbaceous taſte, a little ſaltiſh and ſtyptic; they ſmell like elder, and redden conſiderably the blue paper: the flowers redden it more; they are ſtyptic alſo, but ſweet. The ſalt of this plant ſeems ſomewhat to reſemble the ſalt of coral, containing much acid, and little ſal ammoniac, but united to a great deal of ſulphur and earth." *T. Hiſt.* p. 162. Here is no analyſis of it.—2. Foliorum thea is little tinctured, and of a ſoft, but ſomewhat diſagreeable taſte: oleum tartari makes it a little fetid: it dilutes only ſyrup of violets; but turns ſolutio heliotropii pretty red: vitriol gives it a greeniſh black colour, but precipitates ſlowly and ſparingly: ſp. vitrioli again clarifies it, but in a day lets fall a white mucus. Hence its ſalt appears ammoniacal, while it is (ſubaſtringent, and alſo) ſubviſcid. "The leaves are of a demulcent quality; for which reaſon they are uſed in decoctions, clyſters and cataplaſms, in all diſorders where acrimony offends; being of great ſervice, by their inſipid, viſcous, emollient, and ſaponaceous juice." *James's Diſp.* 464. From *Boerh.* (hiſt. pl. dicta, p. 306.) not much amiſs. So it may be ſaid to be heterogenearum partium.—3. "The country-people, eſpecially the huſbandmen of Kent, give their cattle the leaves againſt the cough of the lungs, being an excellent approved medicine for the ſame; whereupon they do call it bullocks lungwort." *Ger.*—4. It is commended in many diſeaſes, both outwardly and inwardly, but uſed in few.

"Tapſus barbatus ſpecificum eſt contra tympanitem, autore Grembs. . . Hujus folia, plantis pedum nudis intra calceos ſuppoſita, paucis diebus ante debitum purgationis tempus, menſes remorantes leniter movent & educunt." *R. H.* 1095. "Folia ſunt ſaporis ſalſi & ſtyptici, redolentque ſambucum; ſubadſtringunt; ſunt anodyna; valent ad inflammationes, anginam, hæmorrhoides, dyſenteriam, teneſmum, & colicam in enematibus; emolliunt tumores duros & diſcutiunt." *Nucl. Belg.* 301.

VERBENA.

SECT. I.

Verbena, Verbenaca, Periſterium. *offic.* Verbena communis, cœruleo flore. *B. P.* 269. *T.* 200. *H. Ox.* iii. 408. Verbena communis. *Ger.* 718. Verbena vulgaris. *J. B.* iii. 443. *R. H.* 535. *Syn.* 236, Verbena mas, ſeu recta, & vulgaris. *Park.* 674. Verbenaca recta. *Dod.* 150. Verbena, foliis multifido-laciniatis, ſpicis filiformibus. *H. Cliff.* 11. Common Vervain.

It grows in the fields, near highways, &c. and flowers in July and Auguſt. The leaves are uſed. "*Officin.* Herba, ſeu folia." *Schrod.* 697. "*Uſu.* Radix, herba." *Dale* 148. *Ph. Lond. Vet. Ph. Edinb.* "The whole herb is uſed. *Miller's Bot.* 450.

Verbena, quaſi herbena, becauſe all herbs uſed in ſacred rites were ſo called. Hence *Virgil*, "Verbenas adole pingues & maſcula thura." Ecl. viii. v. 65. and *Terence in Andria*, "Ex ara hac ſume Verbenas tibi." Others derive it from Verro. "Nulla Romanæ nobilitatis plus habet quam Hierobotane. Aliqui

"Periſte-

" Periſtereon, noſtri Verbenacam vocant, hæc eſt quam legatos ferre ad hoſtes " indicavimus: hac Jovis menſa verritur, domus purgantur, luſtranturque." *Plin.* l. 25. c. 9. p. 640. So Verbena ſeems to have been an appellative, but Verbenāca the proper name of a particular plant. Vid. *J. B.* & *Bod. in Theoph.* p. 616. a.

Dioſcoridis l. 4. c. 60. p. 264. is περι περιστερεωνος, de Periſtereōne, ſeu Verbenaca recta, but its deſcription does not well agree with that of our Vervain: cap. 61. is περι ἱερας βοτανης, de Hierabotane, ſeu Verbenaca ſupina, of which he ſays, " Herba ſacra (ἱερα βοτανη) quam etiam nonnulli Periſte- " reōna vocarunt, ramulos emittit cubitales, aut etiam majores & anguloſos, " circa quos folia ſunt ex intervallis, quernis ſimilia, ſed anguſtiora, minora- " que, diviſuris inciſa per ambitum, & colore aliquatenus glauco; radicem " longiuſculam & gracilem, flores purpureos ac tenues. . . . Cæterum ſacram " herbam ideo vocant, quod in expiationibus ſit ad amuleta perutilis." Which deſcription agrees pretty well with our plant. It is periſtereon, (ωνος) ōnis, *m.* Periſtereos, ei, *f.* or Periſtereum, ei, *n. g.*

SECT. II.

It is an attenuating and ſubaſtringent vulnerary; called cephalic; and commended for pains and other diſeaſes of the head (the epilepſy not excepted) and eyes, for inveterate coughs, jaundice, dyſentery, ſtone, gout, ague, &c.

" Calfacit & ſiccat, ſaporis amari, aſtringit, cephalica ac vulneraria eſt. " *Uſus præcip.* in dolore aliiſque affectibus capitis (a frigidis humoribus) in " affectibus oculorum & pectoris, in tuſſi inveterata, in obſtructionibus epatis, " lienis, ictero, torminibus ventris, dyſenteria; imprimis atterit ac expellit " calculum, libidinem coercet, febrim tertianam fugat, arthritidem mitigat, " vulnera ſanat, partum facilitat. Extrinſecus in cephalalgia, odontalgia, " alopecia, melancholia; in oculorum lippitudine, imbecillitate, rubore; in " angina, in raucedine (collo circumplaſmatizata) in tumore glandularum, in " faucibus (gargaris) in dolore lienis, (cum azung. porci) ac podagrico miti- " gando, in vulneribus aſtringendis, ac putridis abſtergendis, in procidentia " ani, &c. Then there a No. 1. how ſome cure agues by it; N. 2. how " others amuletice ſtrumas illis curatas ſtatuunt; and No. 3. In dolore capitis " ſedando quantum valeat, ſi de collo ſuſpendatur, videre licet apud Foreſtum, " lib. 9. obſ. 52. (p. 301.) *Præp.* 1. Aqua ſtillat. ex herba cum floribus " æſtate collectis. 2. Eſt & unguentum de Verbena, alias unguentum Jovis " dictum. *Vid.* Auguſt." *Schrod.* 697. A wonderful plant! Yet I find it only among the aperientia deterſiva ad ulcus apertum pulmonis, in *Boerh. Lib. de M. M.*

1. It is of a bitter and ſubaſtringent taſte, and no ſmell. " Radix eſt ſub- " amara." *J. B.* " Verbena ſaporis eſt amari." *Nucl. Belg.* " This plant, " by a chemical analyſis, gives ſeveral acid liquors, much oil, and a conſider- " able quantity of volatile ſalt, and of earth; ſo ſeems to contain a ſal am- " moniac, united to much ſulphur. Vervain is vulnerary, deterſive, aperi- " tive, febrifuge: for the green-ſickneſs, they drink the wine in which it is " infuſed for a night. *Cæſalpin* commends the powder for the dropſy. The

" extract or juice cures agues. Tea of the leaves is given to perſons ſubject " to vapours." *T. Hiſt.* p. 309.—2. Foliorum thea is pretty well tinctured, pretty bitter; and ſomewhat aſtringent, without any proper ſmell. It diluted ſyrup of violets; but gave ſol. heliotropii a pale wine colour: ol. tartari made it orange, and precipitated a whitiſh mucus,—but was not fetid. Vitriol turned it firſt green and then black, precipitating little and ſlowly.—3. It is too much commended to be little uſed. As for the root, I know no uſe made of it but as an amulet for the king's-evil, for which you have the authority of *Marcellus Empiricus.*

VERONICA.

SECT. I.

Veronīca, Verônica mas, Betonica Pauli. *offic.* Veronica mas, ſupina, & vulgatiſſima. *B. P.* 246. *T.* 143. *R. H.* 851. *Syn.* 281. Veronica mas, ſerpens. *Dod.* 40. Veronica vulgatior, folio rotundiore. *J. B.* iii. 282. Veronica vera & major. *Ger.* 626. Veronica mas, vulgaris, ſupina. *Park.* 550. Veronica ſupinâ, vulgaris, foliis ſerratis. *H. Ox.* ii. 318. Veronica caule repente, ſcapis ſpicatis; foliis ovatis, ſerratis, ſtrigoſis. *H. Cliff.* 8. The Male-Speedwell, or Fluellin. *An Veronīca aut Veronĭca?*

It grows in dry and hilly paſtures, as on Saliſbury craigs, &c. flowering in June. The herb is uſed. " In paſcuis ficcioribus & ericetis copioſe pro- " venit. Locis apricis, arenoſis, & ſabuloſis delectatur; æſtate floret." *R. H.* " It grows in woods, and ſhady places; and flowers in June. *Miller's Bot.* 451.

" Veronica apud recentiores herba eſt celebratiſſima, Græcis & Latinis " ſcriptoribus forte incognita, quamvis Dodonæus velit eſſe Betonicam Pauli, " lib. 7. (p. 616.) Cæſalpinus vero ad myoſotidem Dioſcoridis, at columna " ad Alyſſon ejuſdem, referendam cenſet.". *B. P.* " Veronica dicta recen- " tioribus, quaſi φερονικη, quod triumphet inter plantas noviter repertas." *Hoffman*, p. 460. " Veronica comes perhaps from the Latin word Ver, the " Spring, as it were a little herb of the ſpring." *Lem. Dict.* 567. Vid *Paul.* l. 7. p. 616.

SECT. II.

It is a mild ſubaſtringent vulnerary; called alexipharmic, cephalic, pectoral, carminative; and is commended in the vertigo, apoplexy, cough, aſthma, conſumption, ulcers of the lungs &c. colics, gravel, obſtructions of the viſcera, barrenneſs, intermitting and peſtilential fevers, ſcurvy, ſcabies, gout, rickets, aphthæ, wounds, and what not?

" *Officin.* Folia, flores. *Vires.* Calfacit & ſiccat, ſaporis amari & aſtrin- " gentis, incidit, vulneraria eſt inſignis ac ſudorifera. *Uſus præcip.* in eroſione " & obſtructione pulmonum, lienis, hinc & imprimis in colica, phthiſi, ſca- " bie, pruritu, peſte, vulneribus, &c. Extrinſecus famoſiſſima eſt in vul- " neribus abſtergendis, aſtringendis, in duritie lienis, in colica (clyſ.) *Præ-* " *par.* 1. Conſerva, ex ſummitatibus. 2. Aqua ſtillat. ex herba cum incipit " florere.

" florere. 3. Syrupus, ex ſucco. 4. Sal ex cinere." *Schrod.* 698. Aromaticis, aper. deterſ. ad ulcus pulmonum, antiſcorbuticis lenioribus, & in rachitide propriis, annumeratur in *Boer. Lib. de M. M.*

1. It is neither acrid, aromatic, nor bitter; but, as Paulus has it, " guſtantibus nullam fere qualitatem exhibet:" being almoſt inſipid at firſt, then a little rough, and ſcarcely bitteriſh; having no ſmell. " Folia ſunt ſaporis " amari & acris." *J. B.* " Saporis eſt ſubamari & ſubacris." *Nucl. Belg.* 302. " The leaves are bitter, and redden conſiderably the blue paper. . . By a chy" mical analyſis it yields much earth, acid, and oil." *T. Hiſt.* p. 166. " It " is very penetrating, for if it be taſted it affects the whole mouth as if it were " ſet on fire." *James's Diſp.* p. 465, who takes it from that ſtupid book, fathered unjuſtly on the Great *Boerhaave*, as if taken from his mouth, called *Hiſtoria Plantarum*, &c. *Romæ* 1727. in 8vo. But if Dr. James had taken proper notice he would have ſeen, that what I have quoted, as well as a great deal more, is not ſaid of his Veronica, but of the Becabunga, though true of neither.—2. Herbæ thea is only a little bitteriſh, and ſubaſtringent, and not diſagreeable: a ſolution of vitriol turns it black.—3. The ſimple diſtilled water is ſaid to be green by Elſholtius, (in his *Deſtillatoria curioſa*, *Berolini*, 1674, in 8vo.) though performed in glaſs veſſels: and that this colour continues but for three months; but if diſtilled in wine, the green will be deeper and laſt more than a year. Vid. *Schrod. Mang.* p. 499.—4. Veronica is called by ſome European Tea; and is juſtly preferred to the Aſiatic, being reckoned an univerſal purifier and ſweetner of the blood; but more eſpecially uſeful in a ſcorbutic and purulent acrimony. It is not only commended in many diſeaſes, but there are many obſervations in authors of its good effects in not a few; as in barrenneſs, in *Sim. Paulli Quad. Bot.* p. 513; ſpreading ulcers. *Ibid.* 512; ſtone in the kidney for ſixteen years. *Germ. Ephem.* an. 1. obſ. 107; Fiſtulæ thoracis. *Ibid. Decur.* 2. an. 3. obſ. 166. Vid. *R. H.* " *Fr. Hoffman*" *nus*, late *Prof. M. Hallenſis*, his Diſſertatio inauguralis was *De Infuſi Veronicæ* " *efficacia præferenda herbæ Theæ. Halæ* 1693. in 4to. And we have *Joannis* " *Franci Veronica Theezans*, i. e. *Collatio Veronicæ Europeæ, cum Thee Chinitico.* " *Suabaci* 1693. in 12mo." Vid. *Seg. Bib. Bot.* " Vires Veronicæ tot tantæ" que eſſe dicuntur, ut vix ſatis commendari poſſit. Sanguinem mundificat, " alexipharmaca, & ſudorifera, cephalica atque carminativa eſt. Laudatur " interne contra peſtem & venena; valet ad icterum; prodeſt in malo hypo" chondriaco, ſcorbuto, ſcabie, calculo, mictu cruento, aſthmate, empyemate, " hectica, viſcerum obſtructionibus ac exulcerationibus, febribus intermitten" tibus, rachitide, renum malis, ſterilitate: & externe in vulneribus, ulceri" bus, &c." Vid. *Boecler. in Cyn. Herm.* 513.—Yet this has no place in the *London M. M.*

VIOLA.

SECT. I.

Viola, Viola Martia, Violaria. *offic.* Viola Martia, purpurea; flore ſimplici, odore. *B. P.* 199. *T.* 419. *H. Ox.* ii. 474. Viola nigra, ſive purpurea. *Dod.* 156. *Ger.* 850. Viola Martia, purpurea. *J. B.* iii. 542. *R. H.* 1049.

Syn.

Syn. 364. Viola ſimplex Martia. *Park.* par. 282. Viola acaulis, ſtolonibus teretibus reptatricibus, pedunculis radicatis. *H. Cliff.* 427. Purple ſweet Violet.

" In aggeribus ſepium invenitur, ſed rarius." *R. H.* 1050. " Ad ſepes & " in aggeribus foſſarum." *R. Syn.*. " Violets are found frequently wild in " the hedges, flowering in March, though what are made uſe of in the ſhops " are cultivated in gardens." *Miller's Bot.* 432. The leaves, flowers, and ſeeds are uſed. " Notandum tres Violæ partes eſſe in officinis, ſed non ſub " eodem nomine. Flos enim ſolus Violæ nomen retinet: ſemen & folia Vio- " lariæ, ſeu matris violarum." *Hoffm.* 77. Viola dicitur quaſi ſola, ab *ἰον* or *Io:* others think quaſi Vitula. Vid. *B. P.* 198.

" Viola (*ἰον*) folium habet hederaceo minus, tenuius atque nigrius, alioqui " haud ita diſſimile. Cauliculus a radice medius prodit, in quo floſculus per- " quam ſuaviter olens, purpureus. Locis naſcitur opacis & aſperis. Refri- " gerandi naturam habet." . . *Dioſcor.* l. 4. c. 122. p. 289.

SECT. II.

The flowers of violets are emollient, detergent, diuretic, and purgative; called cordial and pectoral; and commended in bilious fevers, coughs, hoarſeneſs, pleuriſy, heat of urine, &c. The leaves have the ſame virtues, ſave what depends on the ſcent: the ſeeds are much commended as a diuretic in the gravel.

" Violaria (præcipue flos) refrigerat 1. humectat 2. Flores exiccati refrige- " rant imbecillius, ſiccantque. Emollit, laxat, cordialis eſt ac pectoralis, ex- " pectorationem promovet. *Uſus præcipui* ac creberrimi in bile, præcipue atra " mitiganda, in fervore febrium compeſcendo doloreque capitis inde nato, in " tuſſi, aſperitate gutturis, catarrhis acribus, pleuritide, &c. No. 1. Flores " alvum leniter ſubducunt. No. 2. Locum ſibi vendicant inter flores illos " cordiales famoſos. Extrinſecus adhibetur herba crebro in lotionibus, cata- " plaſmatibus, clyſteribus & ſimilibus. Seminis uſus rarus eſt, iſque in ob- " ſtructione renum, ubi emulſioni potiſſimum inſervit; de qua nota, quod " plerumque vomitum ac feceſſum moveat. doſis ʒß. ad ʒj. *Præpar.* 1.—4. " Syrupi varii. 5. Conſerva. 6. Acetum. 7. Oleum infuſum. 8. Aqua " ſtillat. ex floribus. 9. Aqua, e tota herba. 10. Tinctura. 11. Extrac- " tum, ex ſucco. 12. Trochiſci." *Schrod.* 700. Violaria aquoſa mollis emol- " liens & leniens eſt, in *Boerh. Lib. de M. M.*

1. All the parts of the plant are of a viſcous, diſagreeable, or nauſeous (as it were rancid) taſte; and the flowers only ſmell very ſweet. " Flores odoris " gratiſſimi, ſaporis viſcoſi & parum acris; ſemina ſpirant odorem terebinthi- " naceum." *Nucl. Belg.* 304. " The root of this plant is a little ſaltiſh, glu- " tinous, and deterſive; it reddens not the blue paper, neither do the leaves, " which are inſipid, and more glutinous; the freſh ſeeds redden it a little, and " are ſalter than the roots. There is a ſlimy juice in the violet, which in- " volves the other principles, and hinders their activity: for by a chymical " analyſis it yields ſeveral acid liquors, much oil, a good deal of volatile and " of fixed lixivial ſalt. . . The infuſion rad. ʒij. purges upwards and down- " wards.

" wards. Poterius ſays florum pulv. ʒj purges pretty well." *T. Hiſt.* p. 170. —2. Foliorum thea is ſubturbid, very viſcid and ropy; of a diſagreeable, mucilaginous, and ſubacrid taſte. Oleum tartari makes it yellow and ſmell ſomewhat urinous, without deſtroying its viſcidity; ſpir. vitrioli ſomewhat diminiſhes it. It reddens a little ſol. heliotropii. Solutio vitrioli makes it blackiſh-brown and opake; which ſp. vitrioli turns ſemipellucid, without changing the colour. Since acids turn the flowers red, it is plain the plant contains little of it. Hence it is evidently ſaponaceous, emollient, and deobſtruent, as well as diuretic and cathartic. Externally uſed it is more efficacious than althæa; and inwardly may be of great uſe in diſeaſes of the breaſt, urinary paſſages, obſtructions of the viſcera, &c.—3. The Greeks ſeem only to have uſed it as a cooling diluent. Vid. *Dioſcorid.* l. c. & *Galen. Simpl.* l. 6. p. 48. But the Arabians as a purgative emollient, deobſtruent, anodyne, yea and ſoporiferous medicine, as well as pectoral &c. Vid. *Meſue Simpl.* 1. c. 11. p. 36. 1. However at preſent little uſe is made of it, except the flowers in the ſyrupus violarum: though the herb would do well in infuſion (*more theæ*) dried to ʒij; the ſeed in emulſion to ʒß. And the herb at leaſt deſerves to be uſed as much as any of the emollients in clyſters, fomentations, and cataplaſms. " Semen eſt lithontripticum inſigne, D. Butlero olim inter arcana." *R. H.* " Semen urinam potenter movet. Maximilianus Imp. Medico qui ei " illud revelabat numerari juſſit 10000 imperiales." *Alb. in M. S.* " Singula- " rem obſervationem Scholtzius in epiſt. 192. p. 310. tradidit; ſubſequens " emulſio (inquit) in ſuppreſſione urinæ ultra ſeptimum diem, ad miraculum " uſque exercuit ſuas vires in conjuge Joachimi Pauwitz, & eſt ſecretum divi " Maximiliani. Excrevit calculos ultra mille & quingentos, & aliquot urinæ " menſuras. ℞. Sem. viol. purp. ʒß. cum aquæ veronicæ ſ. q. F. emulſio." *Sim. Paulli Q. B.* p. 167. N. B. Water draws a fine purple tincture from the flowers, but ſpirits only one of an orange colour.

VIRGA AUREA.

SECT. I.

Virga aurea. *offic.* Virga aurea anguſtifolia, minus ſerrata. *B. P.* 268. V. aurea vulgaris latifolia. *J. B.* ii. 1062. *T.* 484. V. aurea. *Dod.* 142. *Ger.* 430. *R. H.* 278. *Syn.* 176. Virga aurea vulgaris. *Park.* 543. 1. *H. Ox.* iii. 124. Solidago caule erecto, racemis alternis, erectis. *H. Cliff.* 409. Common Golden-rod.

It grows in thickets, woods, &c. flowering in Auguſt. The leaves and tops are uſed." " *Officin.* Folia & flores." *Schrod.* 703. *Dale* 89. *Uſu.* Herba. *Pharm. Vet. Lond.* & *Pharm. Edinb.* " Virga aurea, quæ a forma & floris " colore luteo nomen habet; ab aliis propter vires & ſolidago & conſolida " dicitur. Quibuſdam pana chironium Theophraſti 9. hiſt. 20. & *Plinii* 25. " c. 4. &c. *B. P.*

" Solidago Saracenica. Virga aurea eſt novum genus herbæ, ab Arnoldo " villanovano clarigatum, circa illa tempora, quibus Chriſtiani bellum ſacrum " gerebant contra Saracenos; a quibus reduces afferebant. . . Uſualis eſt illa iv.

" apud Bauhinum (that is Virga anguſtifolia, minus ſerrata. *B. P.*) licet ſine " errore uti poſſis & tribus anterioribus, & duabus poſterioribus. He has but " ſix ſpecies.) Nullum enim hic diſcrimen eſſentiale eſt." *Hoffm.* p. 190.

SECT. II.

It is a ſubaſtringent vulnerary and diuretic; called lithontriptic; and is recommended for wounds, ulcers, diarrhœas, dyſenteries, hæmoptoes, the ſtrangury, ſtone, &c.

" Calfacit & ſiccat 2. aſtringit, vulneraria eſt celeberrima, intrinſecus & " extrinſecus adhibita, nec non & lithontriptica diureticaque non e poſtremis. " Confert itidem, diarrheæ & dyſenteriæ; ſanguinis expuitione medetur; " mucilaginem renum & ureterum efficaciter abſtergit; putredinem gingivarum, dentiumque vacillationem curat. *Præpar.* aqua ſtillat. ex herba cum " floribus, Julio & Auguſto col." *Schrod.* 703. Eſt e remediis in nephritide (a calculo renum &c.) propriis in *Boerh. Lib. de M. M.*

1. It is of a pretty agreeable ſubaſtringent and ſomewhat aromatic taſte, and ſoft ſmell. " Radix, ſaporis aromatici." *J. B.* " Saporis eſt acris, ſub- " amari, & ſubauſteri." *Nucl. Belg.* 306. " It is a ſtyptic bitter, and does " not redden the blue paper. Its ſalt ſeems to reſemble much the natural ſalt " of the earth, but mixed with much oil and terreſtrial parts: ſo this plant is " vulnerary and diuretic." *T. Hiſt.* p. 172. Hear again *Dr. James:* " This " plant is ſo acrimonious, that no pepper can be compared with it; though " it leaves not the leaſt reliſh of acridneſs in the mouth, but proceeds through " the whole body. It is like the ranunculus acris of the ſhops, and is of a " moderately or ſomewhat aſtringent taſte, which at firſt is not unpleaſant, " but leaves an ungrateful reliſh in the mouth." *(Diſpenſ.* p. 468. from that nonſenſical Hiſt. Plant. fathered on Boerhaave, p. 147. though evidently falſe and inconſiſtent with itſelf.)—2. Foliorum & ſummitatum thea is of the colour of common brandy; taſtes almoſt like China root, but a little ſubaſtringent; and has little ſcent: with ſyr. viol. it became a little greeniſh; and with ſol. heliotrop. of a ruby colour; but did not redden the blue paper. Solutio vitrioli turned it firſt green, then black, and ſoon precipitated without becoming clear above. This tea with ſome might paſs for a weak and ſomewhat muſty bohea. *Mr. Hope* informs me it is a famous lithontriptic at *Aix-la-Chapelle.*—3. It is commended alſo in obſtructions of the viſcera, jaundice, beginning dropſies, ulcers in the mouth and throat, looſe teeth, putrid gums, &c. but eſpecially in the ſtone and gravel. " Tantæ ipſius laudes in viſcerum ob- " ſtructionibus ad hydropem jam inclinantibus, ut diu in ſecretis fuerit habita " in decocto. Expurgat enim aquam per urinas. In calculo primam expe- " rientiam habuit dictus Villanovanus, qui in pulvere uſurpavit. Et celebrat " in hoc affectu Satyricus novus, qui ſe Euphormionem appellat. In ulceribus " internis, prodeſt ſubductione ichōrum per urinas. . . In externis juvat ex- " ſiccatione & abſterſione quibus facultatibus valde excellit. In exulceratio- " nibus oris mirum quam commendarit olim Saxonia præceptor." *Hoffman.* p. 191. (N. B. *Joan. Barclaii* Euphormionis Satyricon, *Paris* 1605 & 1610. & *Marci* 1628. edit. tres. in 12mo. *Bib. Thuana.* ii. 383.) " De Virga aurea

" non dubitamus insigniſſimum ac elegantiſſimum locum ex Barclaii Satyrico " (p. i. p. 51. ſeq.) totum laudare tranſcriptum. Spondet enim calculoſo tri- " duanam curationem. Cui cum adnuiſſet æger, in proximo monte, vota " faciens Æſculapio, virgam auream offendit, herbam ſcilicet quæ calculo " bellum indixit, multo felicius quam aut veratrum amentiæ, aut vulneribus " aſcyron. . . . Cæterum contuſum in renibus calculum in innoxium pulve- " rem ſolvit. Non in latere, non in veſica dolor, adeo ut tam facili remedio " pudeat calculum timuiſſe. Etenim in hyemem ſiccatur æſtivis umbris planta, " & ubi gravitas lateris coeuntem morbum præſagit, aureus pulvis ad ʒij. mero " delibutus ſumitur, ſive ovo leviſſime cocto permixtus. Recenſet vero ob- " ſervationem, quod ubi recentem plantam adhibere coactus fuiſſet autor, " primo die nil viſum ſit ad morbum feciſſe medicamentum, ſed biduo deinde " repetitum, ſupra fidem eſt quam egregie refellerit acerbiſſimum morbum. . . " Pulveris ejuſdem mirabilem ſucceſſum, a ſe primo divulgatum, nobilem " matronam comprobaſſe in innumeris nephriticis ſcribit Car. Piſo. l. de Seroſa " collu. p. 388. item probatum dicit Solenander, conſil. p. 66." *Wedelii Amæn. M.M.* l. 1. § 3. c. 9. p. 185. Whether it is a powerful remedy in the ſtone let experience determine. Certainly it is very ſafe; and may be taken in ſubſtance, infuſion, decoction, &c. ad libitum. Vid. *Euphormionis Luſinini*, ſive *Joan. Barclaii Satyricon. Amſterodami* 1634. in 16°. (potius 32°.) p. 53.

LECTURE LXII.

Of Fruits.

AMYGDALÆ.

SECT. I.

AMygdalus. *offic.* Amygdalus ſativa. *B. P.* 441. *T.* 627. *R. H.* 1519. Amygdalus. *Dod.* 798. *Ger.* 1445. *Park.* 1515. Amygdalus dulcis & amara. *J. B.* i. 174. Amygdalus, foliis petiolatis, ſerraturis infimis glanduloſis. *H. Cliff.* 186. Amygdala amara & dulcis. *offic. Dale* 302. The Almond-Tree.

It grows wild in Barbary, particularly in the hedges about Tripoli, and is the Amygdalus ſylveſtris *B. P.* Amygdalus ſylveſtris in ſepibus Tripolitanis *Rauwolfii Ibid.* 442. Whence by culture all the varieties of Almonds have been produced. It is cultivated in South-France, Spain, &c. but ſeldom ripens the fruit well in Britain, though it flowers early in the ſpring, ſometimes in March. The kernels of the fruit only are uſed, of which ſome are ſweet, others bitter. " *Officin.* Utriuſque nuclei, Amygdala *(orum)*, vel A- " mygdalæ *(arum)*, dicti." *Schrod.* 532. " Amygdalorum maximorum, medi- " ocrium & minimorum deſcriptiones, vid. apud *J. B.* Apud nos maximi " æſtimantur Amygdala Jordanica dicta, quæ majora ſunt, & longiora, & " anguſtiora, craſſiora tamen & teretiora vulgaribus valentianis, guſtu etiam " delicatiore." *R. H.* 1519.

" Amygdalus, *Græcis* 'Αμυγδαλεα, & 'Αμυγδαλῆ, vocatur: fructus 'αμυγ-
" δαλη & ἀμυγδαλον. . . . Latinis etiam ut Catoni, nux græca vocatur,
" quamvis Columella nuces Græcas ab Amygdalis videtur distinguere, unde
" Ruellius eum per Græcam nucem, tantum Amygdalam amaram intellexisse
" suspicatur." *R. H.* 1518. *Dioscorides* does not describe it; but many pro-
" perties of it are to be found in *Theophrastus* and *Pliny*. Vid. *B. P.*

SECT. II.

Sweet almonds are antacrid and nourishing: the bitter are suspected as narcotic.

Almond milk, or the emulsion of sweet almonds, dilutes, quenches thirst, corrects acrimony, and nourishes; and is much used in all hot, acute, and inflammatory distempers. The oil of sweet almonds relaxes, lubricates, blunts acrimony, and is anodyne; and commended in coughs, hoarseness, heat of urine, nephritic pains, costiveness, &c. The oil of bitter almonds is used only externally as anodyne, for pains of the ears, deafness, &c.

" Dulces nutritivæ sunt, temperate calidæ & humidæ, humorum acrimo-
" niam lenientes, & hinc dolorem & vigilias ab acrimonia oriundas demul-
" centes: adhibentur præcipue in emulsionibus. Amaræ sunt cal. & siccæ 2.
" attenuant, aperiunt, extergunt, diureticæ sunt, obstructioni jecoris, lienis,
" mesenterii, uterique conferunt. Extrinsecus lentigines tollunt, si masticatæ
" illinantur, capitis dolori subveniunt (in frontalibus). *Præpar.* 1. Confectio
" Am. dulcium. 2. Conf. Am. amar. 3. Oleum expressum Am. dulcium.
" 4. Oleum exp. Am. amararum. Oleum dulce lenit, maturat, anodynum est,
" ususque præcipui in colico ac nephritico dolore mitigando (propinatum dosi
" ʒj. vel ʒij. cum manna, vel & clysmati infusum) infantulis recens natis
" creberrimo ad tormina ventris compescenda cum saccharo penidiato exhibe-
" tur ad ʒij. quin etiam ad mitiganda tormina puerperarum usus ejus creber-
" rimus est. Olei amari vires ex superioribus colligendæ sunt." *Schrod.* 532.

1. The taste of the one is soft, sweet and agreeable; of the other bitter and aromatic, and not disagreeable: and both very oily and farinaceous.—2. Although the flavour of the bitter almonds recommends their use in ratafias and other palatable drams; yet their effects seem to demonstrate that they contain something of a malignant or narcotic nature. " Amygdala amara capitis do-
" loribus auxiliantur, fronti temporibusve inducta cum aceto & rosaceo. . . .
" Porro comesta dolores adimunt, alvum emolliunt, somnum faciunt . . . quina
" senave si præsumantur, ebrietatem arcent. Enecant & vulpes cum qua-
" piam esca devorata." *Dioscorid.* l. 1. c. 176. p. 83. " Dioscorides quidem
" pridem posteritati reliquit quod Amygdala amara κτεινει ἀλωπεκας βρωθεντα
" συντινι; verum nemo posterorum, quod sciam, scripto assensum præbuit, aut
" confirmavit. Marcellus Virgilius, (qui claruit circa 1506.) post literas re-
" natas, de hujus tectus lectione anxius, casu didicit, quod ratione carere
" videbatur, vulpes nimirum demum Amygdalis amaris enecari, nisi contige-
" rit e vicino aquam lambere, credidit, postquam ab amico fide digno intel-
" lexit felem pharmacopœi dulciariis assuetam, comestis 7. vel ad summum 8.
" Amygdalis amaris, cœpisse primum intus torqueri, & veluti furiosum circum-

" agi; toto tandem corpore diſtentam, difficillimum mortis genus obiiſſe, " periiſſeque non ultra horam protracta vita a cibo illo ſumpto. . . Poſtea gal- " linas quoque ab his necari etiam caſu innotuit. . . *Jeniſius* ſciuro Amygda- " lam amaram lethiferam comperit. Ciconiæ, columbis, gallo gallinaceo, feli, " & vulpi, de quo imprimis dubitabatur, mortem attuliſſe hiſtoriæ propoſitæ " ſignificant." *Wepfer. Cicut.* p. 245. ſed vide a p. 235. ad p. 249. where you have theſe hiſtories; and alſo the effects the bitter almonds had on two cats and a dog that eſcaped with their life: and learned reflexions on the whole. And now, one reaſon for rejecting the aqua ceraſorum nigrorum, given by the committee, is the uſe made of bitter almonds in it. " Add hereto, that the " diſtillation is frequently made, in whole or in part, from bitter almonds, a " material which is at leaſt equally poiſonous with the laurel leaves them- " ſelves." Narrat. *Pembert. Diſpenſ.* p. 77.

Though the leaves of the lauro-ceraſus *Cluſii*, or common laurel, have been long uſed, for their flavour in drams, milks, &c. yet their virulency was never ſuſpected till 1728, when two women at Dublin were poiſoned by its ſimple diſtilled water, the one having taken but about $\frac{2}{3}$ of two ounces, and the other five ſpoonfuls. This gave occaſion to the making ſeveral experiments on dogs, which this water killed almoſt in an inſtant, in a very ſmall quantity. It was obſerved that neither the infuſion nor juice was near ſo virulent as the diſtilled water. For it required ſucci expreſſi ℥iv. to kill a dog, which had taken ℥v. of the infuſion in leſs than an hour before. Yet aquæ ſtillat. ſimplices taxi, lauri, had no ſuch effect. The ſymptoms on dogs reſembled much the epilepſy. Vid. *Phil. Tranſ.* No. 418. p. 84. to p. 100. and No. 420. p. 163. So that which is moſt agreeable, and moſt volatile in theſe leaves appears to be the moſt virulent.

" Bitter almonds have been found poiſonous to dogs and ſundry other ani- " mals; and a water diſtilled from them, when made of a certain degree of " ſtrength, has had like effects." *N. Diſp.* p. 78.—" Boerhaave recommends " them in ſubſtance as diuretics, which heat moderately, and which may " therefore be ventured upon in acute diſeaſes." *Ibid.* " Amygd. amaræ, ob " ſui amarorem, ad caliditatem inclinant, & minus temperatæ ſunt ac dulces; " harum oleum expreſſum diureſin movet, calculum & nephritidem curat, eſt " quoque antipleuriticum." *Boerh. Hiſt. Pla.* p. 681. Ill quoted!

" Anal. chymica ex Amygd. dulc. bene maturarum ℔v. prodierunt humo- " rum ℥xj. ʒv. gr. xlv, olei ℥xliß. gr. xxxix, carbonis ℥xij. ʒvij. gr. lxiii. " unde cinerum ℥ij. ʒj. gr. lxvi. & inde ſalis fixi alcali ʒij. gr. xxi. (terræ ʒxv. " gr. xlv.) ac jactura fuit ℥xij. ʒv. gr. lxix." *Geoff.* iii. 76.

SECT. III.

The ſweet almonds are much uſed in emulſion; an ounce blanched ſufficing to make a bottle. The oil expreſſed without heat, and recent, may be taken to ſeveral ounces.

The cold ſeeds are expelled the *London Diſp.* I wiſh almonds may ſupply their place. But the ſweet are ſo nearly allied to the bitter, that I cannot help ſuſpecting them a little. " Ex Amygdalis dulcibus oleum dulce recenter ex-

" preſſum, frequenter uſurpatur. . . Eſt ſane medicamentum ευπορισ̃τον, ad " multa efficax, blandum & gratum; ita ut a plurimis panacea merito habea- " tur. Exhibetur ad ʒj. ʒiv. vel ʒviij. &, pro neceſſitate, reiteratur tertia, " vel quarta quaque hora." *Geoff.* iii. 80. But becauſe it ſoon turns rancid I prefer, to what we get from London, good ſweet olive oil. Is it any worſe than the beſt oil of ſweet almonds? How can ol. Amygd. amar. be diſtinguiſhed from it?

N. B. " Oleum per retortam multoties diſtillatum, plurimum humoris aquei, " acris, tum acidi tum alcali urinoſi, disjicit, aliquantulum capitis mortui " nigri, in retortæ fundo relinquendo, ita ut totum oleum, per iteratas diſtil- " lationes, converti videatur in terram nigram, aquam, & aliquam ſalis tum " acidi, tum alcali urinoſi portionem admodum exiguam, . . . Amarus ſapor " in expreſſo (Amygd. amar.) oleo minime diſtinguitur, licet expreſſum mag- " ma intenſam ſervet amaritiem." *Geoff.* iii. 77. & 83. who gives the analyſis of green ſweet almonds, p. 76. and of bitter almonds, p. 83.——Almonds are not eaſily digeſted.

ANACARDIUM.

SECT. I.

1. Anacardium, Anacardium Orientale. *offic.* Anacardium. *B. P.* 511. *J. B.* i. 334. *Garciæ.* Cluſ. exot. 198. *Acoſtæ.* Ibid. 272. *Ger.* 1544. *Park.* 1563. *R. H.* 1813. Oepata. *H. Mal.* iv. l. 45. p. 95. Arbor Indica fructu conoide, cortic. pulvinato nucleum unicum, nullo officulo tectum claudente. *R. H.* 1566. " Anacardium Orientale. *Jonſ. dend.* 156. *Pluk. Alm.* 28." *Dale* 310. The Anacardium, or Mallacca Bean-tree. *Dale.* Vid. *Lin. Fl. Zeylan.* p. 23.

It is a fruit, or rather nut, of the figure of a bird's heart flatted, black and ſhining on the outſide, and containing, within a double ſkin or ſhell, the cellular interſtices whereof are filled with a black viſcous cauſtic liquid, a whitiſh kernel, of a ſweetiſh almond-like taſte, and no ſmell, brought from the Eaſt-Indies.

The Anacardium tree is ſaid to be very large, and to grow in Malabar, about Cochin chiefly. The Arabians called it Balador, as did the latter Greeks Anacardium, on account of its figure. Vid. *Garciam.* " Anacardio " nomen indiderunt recentiores Græci (nam veteribus ignotum fuit) a cordis " tum ſimilitudine, tum colore, Arabum veſtigia ſecuti, quibus Balador, In- " dis Bybo dicitur." *Garcias.* l. c. Yet I find in *Paulus*, l. 7. c. 11. p. 659. *G.* a *Theodoretus ex Anacardiis* (though not among his ſimples), a very compound electuary, or confectio.

2. Anacardium occidentale. *offic.* Anacardii alia ſpecies. *B. P.* 512. Acajou. *Thev. T.* 658. Cajous. *J. B.* i. 336. *Ger.* 1544. *Park.* 1568. Acajaiba & Acajuiba Braſilienſibus. *Marcg.* 95-1. Pomifera, ſeu potius prunifera, Indica, nuce reniformi ſummo pomo innaſcente, Cajous dicta. *R. H.* Anacardium occidentale, Cajous dictum, officulo renis leporis figura. *H. Lugd.* 36. (1649.) *Sloan. Cat.* 187. *Hiſt.* ii. 136. Anacardium. *Lin. G. P.* 181. *H. Cliff.* 161. The Cajou or Caſſu-tree. It

It grows in Brasil, Surinam, Malabar, &c. " Anacardium raro in officinis " nostris invenitur, cujus in loco, Anacardium occidentale Jonsoni substituunt, " ac pro Anacardio vero vendunt." *Dale* 310 & 311. It needs no description.

SECT. II.

The kernels are of the nature of almonds; the viscous juice is caustic, and may be used for warts, or so. Some eat the roasted kernels; but the mel & confectio Anacardina, though once famous, have been long and deservedly out of use.

" *Officin.* Fructus, sed raro, calfacit & siccat, (non 4. nec 3. gr. ut non- " nulli volunt, sed remissius) cephalicus est, memoriam ac sensus acuens & " confortans. *Præpar.* 1. Electuarium seu Confectio Anacardina. 2. Mel " Anacardinum. 3. Oleum, sed rarissimum est." *Schrod.* 532.

" Mesues Elect. Anacardino has vires attribuit. Ventris totius inferioris & " cerebri affectus frigidos compescit; sanguinem reddit puriorem & inde spi- " ritu reddito purgatiore & tenuiore, sensus omnes, apprehensionem, intel- " lectum & memoriam juvat; coloremque vividum corpori tribuit." *R. H.* " 1813. e *J. B.* i. 336.

1. The kernel is a soft oily farinaceous substance, the taste of which is commended by some: " Ego vero & virentem conditum, & siccati medullam " degustavi; sed neutro modo mihi delicatus videtur," says *Acosta*. The proper juice in the cells of the skin " est, secundum Cordum, saporis primum dul- " cis, mox acris, deinde vehementissime adstringentis, adeo ut fauces in an- " gustiam constringat." *J. B.* and is used as a caustic in strumis. Vid. *Garciam.* And Acosta calls it admodum causticum & venenosum; adding, " si " quis instillet in putridum & cavum dentem, ipsum urit, frangitque & cor- " rumpit facile." Yet—2. The Indians pickle it green, and eat it like olives; and the confectio was long famous. But green and pickled it is less acrid: and in the confection the Anacardium made not the 22d part of the compoposition, cujus dosis ʒij. (in which butter and honey were the excipients) and that prepared too by maceration and coction in vinegar, so could do little either good or ill. For the Confection vid. *Zwelf. Ph. Ang.* p. 256. and for the Mel Anacardinum *Azaravii.* p. 49. " Non admitto vel mel Anacardinum, " vel Anacardios quovis modo præparatos. Imo damno confectionem Ana- " cardinam, quamvis sapientum dicatur. Imo est confectio stultorum. Ha- " beo enim ab amicis, quosdam ab ejus usu maniacos esse factos, & catenis " opus habuisse. In adolescentia mea, cum quidam ex condiscipulis mussa- " rent hanc confectionem, novi preceptorem meum M. Joh. Helderum acer- " bissime eos increpare, & proponere exempla eorum quibus pessime cesserit. " Interim alter preceptor dedisse ferebatur cuidam ex ordine nostro, quem " omnes sciebamus asinum esse, qui tamen paucos intra menses, eo doctrinæ " provectus est, ut mutato nomine de nobis aliis narraretur fabula. Hic " J. C. factus, ad professuram Wirtebergensem adspiravit, sed intra paucos " annos ita exsiccatus, ut, cum perpetua siti premeretur, quotidie ad ebrieta- " tem usque biberet; itaque & sibi & suis inutilis factus, tandem misere pe- " rierit." *Hoffm.* p. 386. " C. Hoffmannus damnat penitus conf. Anacar- " dinam,

" dinam, . . . quandoquidem quoſdam novit ab ejus uſu maniacos factos." *Geoff.* ii. 398. Vid. *N. Diſp.* p. 79.

BACCÆ ALKEKENGI.

SECT. I.

Alkekengi, Halicacabum. *offic.* Solanum veſicarium. *B.P.* 166. *Dod.* 455. Solanum halicacabum vulgare. *J.B.* 609. *R.H.* 681. Solanum halicacabum. *Ger.* 342. Solanum veſicarium, ſive Alkekengi. *Park.* par. 532. Solanum veſicarium vulgatius repens fructu & veſica rubra. *H.Ox.* iii. 526. Alkekengi officinarum. *T.* 151. Phyſalis, caule ſimplici annuo, foliis integris, ad articulos geminatis, floribus ſolitariis. *H.Cliff.* 62. Veſicaria. *Cæſ.* 213. Winter-Cherry.

It grows wild in France, about Vienna, Rome, &c. In our gardens it flowers in June, and the fruit is ripe in November; when in colour and ſize it reſembles a ſmall red cherry, included in a large red bladder as big as a walnut. " Halicacabus, Arabice Kekengi, Alkekengi, ſive Kekenegi." *Matth.* 757. " Solanum veſicarium, quod folliculi veſicæ inflatæ ſimiles: vel, ut Plin. " l. 21. c. 31. quoniam veſicæ & calculis proſit." *B.P.* 166. Ἁλικακαβος, q. marinus cacabus, ob ſimilitudinem quandam.—" Eſt & alterum ſolanum, " quod peculiari nomine Halicacabum vocant, alii Phyſalida, foliis ſolano " hortenſi ſimilibus, verum latioribus: hujus caules poſteaquam adoleverunt, " proni terram ſpectant: eſt autem fructus intra folliculos orbiculatos veſicis " ſimiles, fulvus rotundus ac levis, ceu uvæ acinus: quo etiam coronarii " utuntur, corollis intorquentes." *Dioſc.* l. 4. c. 72. p. 271. Vid. *Plinium.*

SECT. II.

It is an attenuating antiſeptic, and anodyne diuretic; called lithontriptic; and commended in obſtructions of urine, gravel, ſtone, jaundice, gout, &c.

" Baccæ refrigerant & ſiccant 2. nephriticæ, diureticæ, & lithontripticæ " inſignes ſunt. Uſus præcipui in calculo renum ac veſicæ, in ictero (baccæ " & folia) in ſanguine coagulato. *Præpar.* 1. Aqua ſtillat. ex baccis. 2. " Tinctura ex baccis cum aqua propria. 3. Trochiſci de Alkekengi." *Schrod.* 529.

1. They are of an acid taſte at firſt, then pretty bitter; the herb has a heavy or ſomniferous ſcent, like that of the common nightſhade. " Sapor fructui " acidus, cum pauco amarore: Matthiolo Baccæ vinoſo ſucco refertæ, ſapore " auſtero ſimul & amaro." *J.B.* " Baccæ ſaporis ſunt ſubacidi & ſubamari, " illis utimur pro ſcopo diuretico, in obſtructione urinæ, hydrope, calculo & " colica nephritica." *Nucl. Belg.* p. 12. " The leaves are acrid and bitter; " they do not redden the blue paper, but the fruit reddens it ſtrongly: it ap- " pears at firſt ſouriſh, afterwards it is found very bitter; which gives ground " to conjecture, that there is in the fruit a ſalt reſembling the oxyſal diapho- " reticum Aſalæ, mixed with a little fetid oil: in the leaves the ſame ſalt is " too

" too much loaded with ſulphur and terreſtrial parts to be perceived. Alke-
" kengi is very aperitive and diuretic." *T. Hiſt.* p. 241. " Saporis primo
" ſubacidi, deinde intenſe amari." *Geoff.* iii. 55. " Winter-cherries are ſaid,
" by moſt writers, to be extremely bitter: but, as Haller juſtly obſerves, the
" cherry itſelf, if carefully freed from the covet, which is intenſely bitter,
" has merely a ſubacid taſte." *New Diſp.* p. 70. Neither of theſe writers ſeems to have taſted them.—2. It comes near the ſolanum officinarum *B. P.* in its botanical character, as well as taſte, ſmell, and facies externa of the herb. Hence the fruit contains an antiſeptic acid, (attenuating becauſe) ſtimulating bitter, of a narcotic quality.—3. " Analyſi chymica ex ceraſorum Alkekengi
maturorum & recentium ℔v. prodierunt humorum ℔iv. ʒj. gr. xii. olei ʒiij.
gr. xii. carbonis ʒvi. gr. lx. unde cinerum ʒj. ʒv. gr. xxiv. & inde ſalis fixi
alcali ʒj. ʒß. (ergo terræ ʒiv. gr. lx.) ac jactura fuit ʒviij. ʒij. gr. lx." ſecun-
dum *Geoff.* iii. 55. There is an obſervation (from Jer. Mart.) in *R. H.* of the
morbus articularis graviſſimus cured by taking eight of the berries every change
of the moon, " in ipſo mutationum puncto. Ita expelli per urinam materiam
" mire fœdam, totumque ſe ab hoc morbo liberum affirmabat." And Arnol.
de Villa-nova tells of a cardinal cured of an entire ſuppreſſion of urine for four
days, by the vinum Alkekengi, by the advice parvi medici. " Ex eo ſolo
" experimento (ſays he, lib. de vinis) medicus ille cum parva ſcientia, & pau-
" per, factus eſt magnus & dives." *Herm. Cynoſ. Boecl.* p. 319.

SECT. III.

The doſe is commonly made Baccar. N. x. or xii. each weighing about ʒß. or ϑij. But in a MS. attributed to *P. Albinus*, it is ſaid he often did eat forty or fifty of them at a time.

" Sumi poſſunt crudi iii. iv. vi^{ve}. Eorum ſuccus expreſſus, & coctione
" defœcatus ad ʒj. præſcribitur; aut ad extracti ſpiſſitudinem extractus, ad
" ʒß." *Geoff.* iii. 56. He ſays, " Uſitatiſſimi ſunt ad urinam promovendam,
" &c."

BACCÆ BERBERIS.

SECT. I.

Berberis, Oxyacantha Galeni. *off.* Berberis dumetorum. *B. P.* 454. *T.* 614. *R. H.* 1605. *Syn.* 465. Berberis. *Park.* 1559. Berberis vulgo, quæ & oxy-
acantha putata. *J. B.* 1. 2. 52. Spina acida; ſive oxyacantha. *Dod.* 750. *Ger.*
1325. Creſpinus. *Matth.* 150. *Cæſ.* 99. Berberis, ſpinis triplicibus. *H. Cliff.*
122. The Barberry or Pipperidge-Buſh.

It grows wild, on chalky hills, eſpecially in England, flowering in May. The fruit is ripe in October. The berries, and the bark (*or* liber) are uſed. The oxyacantha Dioſcoridis (l. 1. c. 122. p. 62.) is the oxyacanthus Galeni ſimpl. l. 8. p. 57. D. But oxyacantha Galeni (Vid. de Aliment. facult. l. 2. c. 58. fol. 24. B.) the Berberis. " Creſpinus Matthioli oxyacantha Dioſcori-
" dis non eſt ſed Galeni; cum non ſolum fructus, ſed & folia ſunt acida, ejus
" nomine

" nomine ad ciborum condituram uſurpata: ſpina appendix Plinii (l. 24. c. 13.) " Arabum eſt Amirberis fructu longo acido, non autem rotundo: unde de- " pravata voce officinis dicitur Berberis." *Bauh. in Matth.* p. 152. " Quam " officinæ cum Averroe vocant Berberin, illam Serapio & Avicenna appellant " Amiberberim, aut Amirbarin, nomine adhuc in oriente uſurpato. Itali " vocant ſpinam ſanctam cruciatam Chriſti, quod vulgus putet coronam Ser- " vatoris fuiſſe inde. Sed veriſimilior eſt ſententia de Paliuro. Sed quid apud " Græcos eſt? Fortaſſis oxyacantha Galeni non Dioſcoridis dicunt. Mihi & " inanis diſtinctio; & res ipſa eſt falſa. Et hoc ſatis eſt." *Hoffman.* 126.

SECT. II.

It is an acid, antiſeptic and ſubaſtringent, like acetoſæ folia; called ſtomachic by ſome, cordial by others; and is commended in hot, bilious, and inflammatory diſeaſes, as ardent and peſtilential fevers, vomitings, fluxes, hæmorrhages, &c. The inner bark is an attenuating diuretic and cathartic deobſtruent; and commended in obſtructions in the viſcera, eſpecially the jaundice.

" *Officin.* Fructus (nomine Berberis) collecti autumno. Refrigerant & " humectant 2. partium tenuium, aſtringunt, appetitum excitant, roborant " ventriculum ac epar. Proin uſus ſunt frequentiſſimi in morbis ubi refri- " geratione ac aſtrictione opus, quales diarrhœa, dyſenteria. *Præp.* 1. Con- " diti fructus. 2. Succus liquidus, ex recentibus baccis expreſſus. 3 Sy- " rupus de ſucco Berberum. 4. Rotulæ, ex ſucco & ſaccharo. 5. Trochiſci. " 6. Rob de Berberibus compoſitum." *Schrod.* 546.

1. The berries are very acid and ſomewhat aſtringent to the taſte, but have no ſcent: the leaves alſo are ſour and ſtyptic; yet the inner bark is not acid, ſcarcely aſtringent, but nauſeouſly bitter. " Folia ſapore acido; flores odore " gravi; baccæ ſapore acido & aſtringente." *J. B.* " Arbuſtum totum eſt " ſaporis acidi auſteri, grati, præcipue fructus." *Nucl. Belg.* p. 42. The root " is yellow, very bitter, and reddens very little the blue paper: the juice red- " dens it as (briſkly, or as) much as alum does. This plant analyſed gives " a great quantity of acid liquors, little urinous ſpirit, pretty much oil and " earth. The fruit is chiefly uſed. . . The bark of the root is aſtringent and " deterſive." *T. hiſt.* p. 398.—2. " Analyſi ex ſucci fructuum Berberis ex- " preſſi ℔v. prodierunt humorum ℔iv. ℥xj. ʒj. gr. viij. olei ℥j. carbonis ℥ij. " ʒv. gr. xlviij. unde cinerum ℥i. ʒiij. gr. xlviij. ac inde ſalis fixi alcali ʒiij. " gr. vj. (ergo terræ ℥i. gr. xlij.) & jactura fuit ʒix. gr. xvi." ſecundum *Geoff.* iii. 173. " Vis cardiaca & alexipharmaca ipſis tribuitur." *Ibid.* p. 174.—3. The berries are much commended and uſed in Egypt in ardent and peſtilential fevers; the ſalutary effects whereof Alpinus, and after him Sim. Paulli, &c. experienced. " Berberis fructus in medicinæ uſu valde frequentant, " quos putant cor multum roborare, vireſque reficere, ac perfrigerare, ſitim- " que extinguere, in febribuſque ardentibus atque peſtilentibus iis paratis uti " ſolent. Horum ſiquidem libram in vaſe magno aqua pleno, vel duodecim " etiam aquæ libras continente, mittunt cum nonnullis ſeminibus fœniculi, " vel fruſtro panis, atque per noctem vel diem ſic manere volunt, deinceps

" que

" que de frigida hac expreſſione, per colum transfuſa, cum ſaccharo multo " roſaceo, vel ſimplici, vel ſyrupo acido citri large ægrotis propinant, qua " potione calorem febrilem ſitimque extinguunt, vireſque reficiunt, atque " etiam putredini prævalide obſiſtunt. Præſtantiſſimum auxilium ad alvi " fluxiones apud eam gentem ſua aſtrictione habetur, eoque potu ego olim " ibi peſtifera febre correptus, cum immoderata diarrhœa bilioſa, libentiſſime " felici cum ſucceſſu, Ægyptiorum medicorum conſilio, ſum uſus." *Alpin. Med. Aeg.* l. 4. c. 1. fol. 117. b. See alſo *Sim. Paulli.* Q. B. p. 104. who uſed ſyr. Berb. aqua dilutus. " Acida minus conveniunt illis quorum ventri- " culus cibos tardius concoquit, tum ob caloris aut potius ſpirituum defectum " in hujus viſceris ſucco; tum ob ejuſdem ſucci tenacitatem, quam acida ſem- " per augent." *Geoff.* iii. 175. *Male!*—4. The bark is uſed in dying yellow. " Corticis interioris lutei (quo tinctores etiam utuntur) pulverem in aphthis " puerorum laudat Camerarius in aceto mediocriter acri. *Hoffman.* p. 126. " Cortex interior flavus, tam ramorum quam radicum, vel in cerviſia aliove " liquore decoctus, vel potius in vino albo aut Hiſpanico infuſus, & potus, " experientia noſtra, in ictero remedium eſt præſtantiſſimum." *R. H.* 1605. " Præter multiplices facultates Berberis, hoc ſecretum ab amico recipiebam: " vinum album tenue, in quo medianus cortex, qui inter extimum & ligno " adhærentem eſt, lineo panniculo involutus, per trium horarum ſpatium ma- " ceratus fuerit, mirifice, ſi bibatur, purgare." *Cluſ. H.* 121. *In what doſe?*

The berries may be uſed any way. The gelatina fere ad libitum. It is excellent for acidulating ptiſans &c. in acutis, &c. " Fructuum ſuccus ex- " preſſus & defæcatus ad ℥j. propinatur." *Geoff.* iii. 174. where you have Sim. Paulli's way of preparing the eſſential ſalt (called by him tartar) ſucci Berberis: which is tranſcribed alſo in *R. H.*

N. B. The ſyrupus mororum, & fructus rubi Idæi, are in the *Ph. Lond. Novæ*; and the gelatina rubeſiorum (which well enough ſupplies their place) in the *Ph. Edinb.* But the gelatina Berberorum (potius Berberum) *hujus* is a more powerful acid than any of them; ſo is preferable in ſome caſes, and much ſafer than mineral acids.

BACCÆ JUNIPERINÆ.

SECT. I.

Juniperus. *offic.* Juniperus vulgaris fruticoſa. *B. P.* 488. *T.* 588. Juniperus. *Dod.* 852. *Ger.* 1372. Juniperus vulgaris. *Park.* 1028. Juniperus vulgaris, baccis parvis, purpureis. *J. B.* 1. 2. 293. *R. H.* 1411. *Syn.* 444. Juniperus foliis undique prominentibus, pungentibus, fœmina. *Fl. Lap.* 300. Juniperus foliis ſeſſilibus, patentiſſimis, fœmina. *H. Cliff.* 464. The common Juniper.

This is common on heaths. It is a ſhrubby, low, and ſlow-growing buſh, even when defended from cattle. Its berries do not ripen under two years. The flowering plant is barren. " Cæſalpinus recte ſcripſit, Juniperum quæ " fructum fert non florere. Quod & veteribus obſervatum. Nam referente " Theophraſto, & ex eo Plinio, quidam Juniperorum duo genera tradunt,

" alterum florere nec fructum ferre; quæ vero non florent, ferre protinus, " baccis ſubnaſcentibus, quæ biennio hæreant. . . Fructus, notante Cæſalpino, " matureſcit anno ſecundo, ut aliquando fructus trium annorum contineantur, " cum is, qui maturus eſt, ſervetur ad tertii anni fructum naſcentem." *R. H.* In other countries, as Spain, Italy, &c. it grows to a large tree; for Juniperus vulgaris arbor. *B. P.* is not a different ſpecies. The berries, roſine, and ſometimes the wood, are uſed. " *Officin.* Lignum, baccæ, gummi, fungus." *Schrod.* 609. " *Uſu.* Lignum, baccæ, & gummi." *Dale* 280. *Pharm. Edinb.* " Juniperi baccæ." *Pharm. Lond.*

The baccæ and lignum need no deſcription. Gummi Juniperinum, ſandaracha Arabum, vernix. *offic.* is a hard, brittle, clean, ſemipellucid roſin, of a a pale yellow colour, reſinous taſte, and pretty fragrant ſmell, when heated or burning. It is brought from the Levant.

" Juniperi arbor Maio menſe, cum pluvioſa fuerit tempeſtas, luteam e " cortice ſudat lachrymam, quæ magna in copia, tanquam fungi exigui, arbori " adhæret, nec magnopere odorata eſt." *R. H.* 1412. " They get by inciſion " from the trunk of the oxycedrus a very clear and tranſparent gum, which " is the true ſandarac, but rarely to be ſeen in France, to which is ſubſtituted " the gummi Juniperi." *Savary's Dict.* ii. 946. *Lem. Dict.* p. 285. & 566. " Gum ſandarache comes from Saphis and St. Croix in the kingdom of Fez " and Morocco, and from Sayde in upper Egypt, to Marſeilles, from twenty- " five to thirty quintals per annum." *Savary's Dict.* iii. 559. The cedrus Lycia is but a ſpecies Juniperi. *Dale* 281.

" Lignum vix ſentit vetuſtatem, & carbones dat tantum non æternum vi- " ventes. Chymiſtæ, tradente Matthiolo, aſſeverant, carbonem Juniperinum " accenſum, ac ſuo cinere obrutum ignem integro anno fovere. Trabes Juni- " perinæ fuerunt in *Templo Dianæ*, *Sagunti* (now *Morviedro* in *Valentia*) cui, " religione inductus, Annibal pepercit, ut eſt apud Plinium." *R. H.* 1412. *Hoffman* 269.

It is generally believed to be the ἀρκευθος & Juniperus of the Ancients, (though Dioſcorides's deſcription, l. 1. c. 103. p. 55. does not well agree to it) on account of what may be found in Theophraſtus concerning it. Vid. *J. B.* 1. 2. 292. *Bodæum in Theoph.* p. 195. & alibi. " Juniperus, quod ju- " niores & novellos fructus pariat, antiquis matureſcentibus." *B. P.* Canit Virgilius, Ecl. 10. v. 75.

" Surgamus; ſolet eſſe gravis cantantibus umbra:
" Juniperi gravis umbra: nocent & frugibus umbræ.

" Baccarum vires fuſe traduntur a Scharfio de Junipero, & Joan. Michaele " de eadem." *R. H.* 1412.—Benjamin Scharffius, (ἀρκευθολογια, ſeu Juniperi deſcriptio curioſa, variis medicamentis, obſervationibuſque referta. Jenæ 1679. in 8°. Linden, Lipſiæ 1672. in 8°.) Seguier, B. B. and ſeveral others, have written on this plant.

SECT. II.

The fruit is an antiſeptic, attenuant and ſomewhat deterſive, diaphoretic, diuretic, and carminative; called cephalic, pectoral, ſtomachic, uterine, alexi-

pharmic, lithontriptic, &c. and commended in coughs, conſumptions, flatulent and nephritic colics, gravel, dropſy, menſibus obſtructis, hyſteric fits, ſcurvy, ſcabies, &c. The lignum is ſaid to be as good a ſudorific in the lues Gallica as the guaiacum; and to purify contagious air, if burnt. The vernix is made diuretic and anodyne; and diſſolved in oleo lini is a good ointment for the hæmorrhoids, burnings, &c.

" Lignum calidum ac ſiccum eſt 3. ſuaveolet, unde & raſura ejus non ſine " cauſa in cucuphis adhibetur, quippe cephalicum eſt, nervoſumque genus " inſigniter roborat.

" Baccæ calfaciunt 3. ſiccant 2. diſcutiunt, incidunt, attenuant. Uſus præ- " cipui in cienda urina, ſudore, obſtructis menſibus, obſtructo liene, in " affectibus capitis, nervorum, pectoris (tuſſi), in morbis a flatu (ut colica), in " mucilagine renum & veſicæ, &c. Suffitus uſitatiſſimus eſt tempore peſtis, " tum e baccis, tum e ramuſculis ſuſcitatus. Colliguntur baccæ ſole virg. " exiſtente.—Gummi calfacit & ſiccat 1. (al. 2.) condenſat, diſcutit. Uſus " præcipui in nervorum affectibus, reſolutione frigiditate, contractura, &c. " convenit & in capitis affectibus reliquis a frigiditate ſubortis. Fungus Maio " menſe inſtar muſci adnaſcitur. Inſervit aquæ ophthalmicæ. *Præp.* 1. Aquæ, " ex baccis. 2. Spiritus, ex baccis fermentatis. 3. Oleum ſtillat. e baccis. " 4. Oleum, ex ligno. 5. Sal, ex cineribus. 6. Rob Juniperinum. Mel " Juniperinum. Theriaca Germanorum. 7. Extractum gummoſum, ex ligno " cum cortice. 8. Extractum e baccis ſiccis. Doſis ℈j. ℈ij. Utrumque ex- " tractum excellens eſt ſudorificum & bezoarticum adverſus epilepſias, peſtes, " & affectus alios contagioſos & venenatos. 9. Elixir Juniperinum, admiran- " darum virium in calculo. Doſis cochl. 1." *Schrod.* 609.

1. The berries are of a ſweetiſh ſubacrid reſinous and bitteriſh taſte, and ſomewhat aromatic or balſamic ſmell. " Baccæ, ſapore acri, reſinoſo, cum " quadam dulcedine, tactu quoque ubi inveterârint, oleoſo & glutinoſo." *J. B.* " Saporis dulcis & pinguis aromatici, ſicut & odoris." *Nucl. Belg.* 153. " Sapore acri, aromatico, reſinoſo, dulci." *Geoff.* iii. 633. 2. All the parts of the plant contain a balſam, or reſinous oil, ſomewhat like turpentine, but ſofter, which alſo gives the urine a violet ſmell. " Vim diureticam in Juni- " peri baccis, earumque oleo (inquit Cargillus) in me expertus ſum ſæpius " manifeſtam, & tum ex illis paucis devoratis, tum panem hujus guttula " tinctum, evidenter violarum odore urinas imbuere, non ſecus ac terebinthi- " nam vulgarem, ejuſque oleum ſtillatitium." *R. H.* 1412.—3. Analyſi chymica, ex baccarum Juniperi maturarum & contuſarum ℔v. prodierunt humorum ℔ij. ℥v. ʒj. gr. xviij. olei ℥ix. ʒiij. gr. iij. (whereof were olei eſſent. ʒij. gr. xlviij.) carbonis ℥xx. ʒß. unde cinerum ℥ij. gr. lx. ac inde ſalis fixi alcali ʒiv. gr. xxxviij. & jactura fuit ℥xij. ʒvi. gr. xv. ſecundum *Geoff.* iii. 633. " Baccarum contuſ. ℔vj. per biduum in aquæ ℔xxxvj. maceratæ, deſtillatæ, " præbuerunt olei eſſentialis ʒvij, extracti ℔j. ℥ß. & reſidui exſiccati ℔iv. ℥xiv. ex quibus olei eſſentialis ʒvij. (is this right?) Olei vero craſſi ℥vi. ʒj. gr. liv. diſtillata ſunt." *Geoff.* iii. 634. Hence, if the quantities here be right, the extractum ℔j. ℥ß contained olei ℥ij. ʒv. gr. xl. He ſays there alſo, ligni Juniperi ℔v yielded olei eſſentialis circiter ℥jß, & olei ſpiſſi ℥ix, (that is only twenty-ſeven grains leſs of thick oil, but more than quintuple the eſſential oil got from baccarum ℔v.); and that ſummit. viridium ℔v gave olei fluidi tum limpidi,

limpidi, tum rufi ℥viij. ʒiij. gr. iij. Yet he adds, " Baccæ itaque majorem " olei quantitatem fundunt, lignum minorem, minorem adhuc folia & ſum- " mitates." Hence the accuracy of theſe analyſes is to be ſuſpected, though they are of little conſequence. But—4. However much they are commended in the ſtone and gravel, they ought, as all ſtimulating diuretics, to be cautiouſly uſed in theſe diſeaſes.

" Lapponii baccarum Juniperi decoctiones bibunt, quemadmodum coavæ " & theæ. Suntque præcipua apud illos medicinæ pars. *Schefferus Hiſt. Lap-* " *landiæ.*" *R. H.* 1412. This *Linnæus* poſitively denies: but he ſays the Swedes, in ſeveral provinces, make an excellent cereviſia of Juniper berries. Vid. *Fl. Lap.* p. 301.

SECT. III.

They may be uſed many ways: ſome eat them to ſeveral drachms at a time. The eſſential oil may be given to gut. x. The berries are uſed in the aqua petroſelini compoſita, tinctura jalapæ compoſita, elixir ſalutis; and the oil is in the pilulæ ecphracticæ and pilulæ de gambogia.

" Baccæ ad ʒj. præſcribuntur per diem identidem eſitandæ, vel contuſæ in " aqua bulliente theæ inſtar macerantur. . . . Ex baccarum ℔viij. in aquæ " ℔xxiv. maceratis & deſtillatis olei eſſentialis ℥iij. ad ſummum prodibunt. . . " Sumitur ad guttas aliquot. . . . Rob ad ʒj. exhibetur." *Geoff.* iii. 635. &c. " The oleum Juniperi is uſually preſcribed in colics, and pains from the ſtone " and gravel, from gut. i. ad v. or vi." *Quincy Pharm.* p. 367.

LECTURE LXIII.

BACCÆ LAUREOLÆ.

SECT. I.

1. Laureola. *offic.* Laureola ſempervirens, flore viridi, quibuſdam Laureola mas. *B. P.* 462. Laureola. *Dod.* 365. *Ger.* 1404. *Park.* 205. *R. H.* 1587. *Syn.* 465. Laureola ſempervirens, flore luteolo, *J. B.* i. 564. Thymelæa Lauri folio, ſempervirens; ſeu Laureola mas. *T.* 595. Daphnoides. *Cæſ.* 150. Daphne floribus racemoſis, lateralibus, foliis lanceolatis integris. *H. Cliff.* 147. Dwarf-Laurel, or Spurge-Laurel.

2. Mezereon, Chamælæa. *offic.* Laureola folio deciduo, flore purpureo; officinis Laureola fœmina. *B. P.* 462. Laureola, folio deciduo; ſive Mezereon Germanicum. *J. B.* i. 566. Chamælæa Germanica. *Dod.* 364. Chamælæa Germanica, ſive Mezereon. *Ger.* 1402. *R. H.* 1587. Chamælæa Germanica, ſive Mezereon vulgo. *Park.* 201. Thymælæa Lauri folio deciduo; ſive Laureola fœmina. *T.* 595. Daphne, floribus ſeſſilibus, infra folia ellipticolanceolata. *Fl. Lap.* 105. *H. Cliff.* 147. Mezereon, or Spurge-Olive.

3. Thymelæa. *offic.* Thymelæa foliis lini. *B. P.* 463. *T.* 594. Thymelæa *Cluſ. H.* 87. *Ger.* 1403. *Park.* 201. *R. H.* 1588. Thymelæa Monſpeliaca. *J. B.* i. 591. Spurge-Flax, or Mountain Widow-waile.

The first grows in woods and hedges in England, flowering in February; the berries are ripe in April. The second in Germany; flowering in February and March, as is commonly said: but I have seen it in flower in the end of November, and so it continues till the month of March or so. Vid. *J. B.*. The third grows in South-France, Spain, &c. flowering in July and August.

" *Officin.* Mezerei cortex, folia, & grana, cocci Snidii, seu grana gnidia " dicta." *Schrod.* 770. who has neither of the other two. " *Usu.* Laureolæ " & mezerei, cortex, folia, baccæ. Thymelææ baccæ grana gnidia dicta." *Dale* 313. " Laureolæ folia, baccæ: mezerei radix, cortex, baccæ: thyme- " lææ, baccæ, grana Cnidia." *Pharm. Edinb.* The *London M. M.* justly rejects them all. " Harum omnium (viz. the above three) fructus & semina " grana Cnidia, seu cocci Cnidii dicuntur." *Cod. Medic.* p. cxvii. 2.

" Ratio nominis chamelæa manifesta est. Thymelæam dictam volunt, quod " oleæ ferat folia, & tithymali instar alvum solvat, quasi tithymelæam: certe " tum foliis, tum qualitate tithymalum refert." *R. H.* Vid. *Dioscorid.* l. 4. c. 172 & 173. p. 312. & *Plin.* l. 13. c. 21. p. 334.

SECT. II.

These berries are all violent and dangerous cathartics and emetics, inflaming the stomach and guts: so that they are not used here. Every part of these plants is as bad as the berries, and perhaps even worse than the spurges.

" Mezerei vis est ignea, acerrima, exulcerans, mordens, febres accendens, " cordis principumque partium vires exolvens; validissime bilem, biliosasque " serositates purgans. Corrigitur macerando hor. 24. in aceto, succo mali " Punici aut Cydonii, portulacæ, mucilagine sem. psyllii. Dosis foliorum & " corticum, optime præparatorum & correctorum (sine correctione exulare " debent) à gr. viij. ad xv. N. ob malignitatem rarissime in usum venit. " *Præpar.* Pilulæ de Mezereo. Videsis apud Augustan." *Schrod.* 770.

1. They are all of a burning hot taste, inflaming the mouth for a long time, and smell somewhat disagreeably; tho' the Mezereon flowers have a very sweet scent. " Laureolæ fœminæ & folia & fructus parum degustati fauces totas " inflammant; exterius impositi, vesicas excitant non minus quam euphor- " bium, cujus instar in multis habet, quemadmodum & in purgando. Re- " servatur soli hydropi." *Hoffman* 39. " Cavendum, monet Camerarius, ne " quis vescatur radice (thymelææ) quia paucis horis perimit. Cocco Cnidiæ " vis ardens & fauces adurens. Unde miramur perdices & aviculas, thyme- " lææ baccis avidissime vesci." *R. H.*—2. In Sweden they poison wolves and foxes with Mezereon seeds. " Semina ejus in cadaveribus abscondita, exhiben- " tur a rusticis Sueciæ lupis & vulpibus, quibus adsumptis, pereunt sine mora, " æque ac a seminibus strychni (i. e. nuce vomica)" *Linnæus Fl. Lap.* 105.—3. " Analysi chymica ex foliorum Laureolæ maris recentium ℔v. prodierunt " ℔iv ʒiij. gr. vij. olei ʒij. ʒvij. gr. xlv. carbonis ʒvij. ʒvij. gr. ix. unde cine- " rum ʒij. ʒij. gr. liv. ac inde salis fixi alcali ʒiij. gr. ij. (ergo terræ ʒi. ʒvii. " gr. lii.) & jactura fuit ʒiv. ʒvi. gr. xi." secundum *Geoff.* iii. 693.

BACCÆ

BACCÆ LAURI.

SECT. I.

Laurus. *offic.* Laurus vulgaris. *B. P.* 460. *T.* 597. Laurus. *Dod.* 849. *Ger.* 1407. *Park.* par. 598. *J. B.* i. 409. *R. H.* 1688. Laurus minor. *Park.* 1488. Laurus foliis lanceolatis, venosis, perennantibus, (corollis quadrifidis,) mas & fœmina. *H. Cliff.* 155. The common Bay-tree, or true Laurel.

It grows spontaneously in Spain, Italy, &c. and we have it in our gardens, where it flowers in April or May; but is always barren, the fruit growing on a separate plant. The fruit and leaves are used. Vid. *Lin. Gen. Pl.* p. 174.

The baccæ are small oval nuts, containing, under a thin blackish skin, a dicotyledon kernel, of a subacrid, oily, aromatic and bitterish taste, and fragrant smell.

Laurus is said by some to be originally Greek; others derive it from lavo, others from laudo. It is δαφνη in Greek, and the fruit δαφνιδες. *Dioscorides* (l. 1. c. 106. p. 57.) does not describe it. But several characters of it are noticed by *Theophrastus*, particularly its diversity of sexes, hist. l. 3. c. 8. p. 141. "Daphnen Ladonis filiam famosissimam fuisse poetæ fabulantur, quam cum "Apollo deperiret, & ut potiretur, celeri cursu fugienti instaret, ab eo tandem "capta, matrem tellurem precatur ut in sinum se suum reciperet. Votis ac "precibus Tellus excitata confestim arborem edidit. Re conspecta deterritus "Apollo, arborem gentili nomine donavit, & vulso ramo sese coronavit." *B. P.* Hence *Ovid. Met.* 1. V. 557.

"Cui Deus. At quoniam conjux mea non potes esse,
"Arbor eris certe dixit mea: semper habebunt
"Te coma, te citharæ, te nostræ Laure pharetræ.
"Tu ducibus Latiis aderis, cum læta triumphum
"Vox canet, & longæ visent capitolia pompæ.
"Postibus augustis eadem fidissima custos
"Ante foris stabis; mediamque tuebere quercum.
"Utque meum intonsis caput est juvenile capillis,
"Tu quoque perpetuos semper gere frondis honores."

This is a very aromatic genus, the cinnamomum, camphora, benzoe, sassafras being species of it, according to *Linnæus*.

SECT. II.

They are attenuant, diaphoretic, diuretic, and carminative; called alexipharmic, nervine, stomachic; and commended internally in malignant fevers, palsies, flatulent and nephritic colics, obstructis mensibus, grindings, &c. and externally as anodyne and discutient.

"Folia & baccæ calfaciunt & siccant 3. (baccæ paulo calidiores sunt) emol-"liunt resolvunt. *Usus præcip.* (baccarum) in mensibus & urinis ciendis, af-"fectibus nervorum, paralysi, in colica, in dolore post partum, in cruditati-"bus ventriculi. Extrinsecus conferunt folia ad ictus vesparum, molliunt "tumores,

" tumores, promovent menſes (in ſuffitu ac balneo), leniunt dolores, odontal-
" giamque mitigant (gargar.) *Præp.* 1. Electuarium de baccis Lauri. 2.
" Emplaſtrum. 3. Oleum Laurinum. 4. Oleum ſtillat. Diſcutit inſigniter
" flatus ac ventoſitates, præcipue in ſpaſmo gravidarum, ut & in colica: ſide-
" rata membra illitu reſtituit, auribus inditum dolores compeſcit, auditumque
" confortat, delet impetigines & quaſcunque faciei maculas. Denique ichor-
" oſis capitis ulceribus medetur phthiriaſin & tineas curat. Doſis gr. ij. iij. iv.
" 5. Spiritus. 6. Eſſentia." *Schrod.* 613.

1. The leaves are acrid, aromatic, and bitteriſh, and very odoriferous: the fruit is very oily. " Foliorum ſapor acer aromaticus & ſubamarus: nucleus
" fructus cum aliqua acrimonia, amarus ac pinguis." *J. B.* " Baccæ ſaporis
" acris, amari, aromatici, oleoſi; odoris non ingrati." *Dale* 330. " Saporis
" amari, valde acris, & calidi, odoris aromatici. Folia ſunt ſaporis acris,
" calidi, & parum amari, odoris aromatici." *Nucl. Belg.* 169. " Lauri
" folia odorata ſunt, ſaporem obtinent acrem, aromaticum, ſubaſtringentem,
" cum quodam amarore. Baccæ vero plus odoris & ſaporis habent." *Geoff.* iii. 697.—2. Analyſi chymica ex foliorum Lauri recentium ℔v. prodierunt humorum ℔iij. ℥xv. gr. xlii; olei ℥iv. ʒvi. gr. xxiv; carbonis ℥vij. ʒviß. unde cinerum ʒj. ʒv. gr. lxiv. ac inde ſalis fixi alcali ʒv. gr. iv. (ergo terræ ʒj. gr. lx.) & jactura fuit ℥iv. ʒij. gr. xlii. ſecundum *Geoff.* iii. 696. 3. Many virtues are attributed to this plant. Vid. *J. B.* who has ten pages on it: of which more than five are concerning its uſes and virtues; among which are its uſe againſt thunder, againſt the rubigo ſegetum, in triumphs, victories, &c. In *R. H.* there is more than one page of its *vires:* from which Mr. Geoffroy borrows a great deal without naming him, as is common with him.—4. The leaves partake of the virtues of the fruit, but are leſs oily; and perhaps ſomewhat aſtringent.

SECT. III.

They may be given in ſubſtance to ʒj. in infuſion to ʒij. The oleum Laurinum is uſed externally as a warm diſcutient and anodyne. There is ſtill in our Pharmacopœia an electuarium e baccis Lauri: though it ſhould rather be called El. e foliis Rutæ, as it ſtands now, more than one half of the ingredients being left out; yea and as it has in it zinziber conditum, and the ol. fœniculi not in the former; and the proportions of what remain are altered; to ſay nothing of the excipient. *Is this medicine improved?* The electuarium e baccis Lauri of the New London Diſpenſatory conſiſts of eight ingredients, nine that were in the old one being omitted, and none added. " Remark. This
" (electuary) is greatly contracted from the form of the preceding Pharmaco-
" pœias. See the Narrative of the Committee, p. 111." *Pemb. Diſp.* p. 334.
" The number of ingredients in Electarium e baccis Lauri, being much too
" redundant, is now leſſened." *Narr. Commit.* l. c. A notable remark, and as notable a reaſon for the alteration. May not this be reckoned redundant by others, eſpecially ſince fol. rutæ ſiccata and ſem. petroſelini can add little to the virtue of the compoſition. I wiſh they had informed us by what rule redundancy is to be determined. Vid. *Sydenham de Podagra.* " Their principal
" uſe is in carminative clyſters." *New Diſp.* p. 476. Surely the Edinburgh one was never deſigned for the anus.

BACCÆ

BACCÆ MYRTI.

SECT. I.

Myrtus. *offic.* Myrtus communis Italica. *B. P.* 468. *T.* 640. *R. H.* 1502. Myrtus. *Cæſ.* 127. Myrtus vulgaris ſylveſtris. *J. B.* i. 510. Myrtus Bætica ſylveſtris. *Ger.* 1412. *Park.* 1454. Myrtus floribus ſolitariis, calyce fructus diphyllo. *H. Cliff.* 184. The common Myrtle.

It grows wild in South-France, Spain, Italy, &c. flowering in June and July: it is alſo in our gardens, but ſeldom flowers there before Auguſt. The berries are uſed, and no matter of what myrtle they are. "*Officin.* Folia, "baccæ (myrtilli officinarum myrta)." *Schrod.* 632. "*Uſu.* Folia & baccæ "(myrtilli offic.)" *Dale* 294. "Baccæ." *Pharm. Edinb.* But the leaves are as good; and theſe we may have freſh and good here, which can ſeldom be ſaid of the berries.

Baccæ Myrti or Myrtæ *offic.* are about the bigneſs of juniper berries, ſomewhat oval, with a ſmall crown on the top, containing, within a black ſkin, hard ſeeds ſhaped like a kidney; of an aſtringent ſcarcely aromatic taſte; and no ſmell as we get them.

"Myrtus & Murtus Latinis, Græcis μυρσινη & μυρρινη nominatur, a Myr-"ſine Athenienſi puella, pulchritudine & robore inſigni, amica Palladi, quam "juvenis, ab ea curſu & palæſtra ſuperatus, interemit, invidia ductus quod "elegantia cæteriſque naturæ dotibus, reliquis virginibus præſtaret. Arbuſ-"cula in demortuæ locum ſucceſſit, ſemper Minervæ ut olea chara. Græ-"cum ei nomen remanet ut Plinius, l. 15. c. 29. ſcribit, quo peregrinum eſſe "appareat." Vid. *B. P.* Canit *Virgil*, Ecl. 7. v. 61.

"Populus Alcidæ gratiſſima, vitis Jaccho,
"Formoſæ Murtus Veneri, ſua Laurea Phœbo;
"Phyllis amat Corylos; illas dum Phyllis amabit,
"Nec Myrtus vincet Corylos, nec Laurea Phœbi.

Dioſcorides does not deſcribe the μυρσινη, but is long enough on its virtues, l. 1. c. 155. p. 77. and his l. 1. c. 48. is de (μυρσινελαιῳ) oleo myrtino.

SECT. II.

They are aſtringent; called ſtomachic; and commended in fevers accompanied with a diarrhœa, &c. and outwardly for ſpungy gums, &c. like the cortex granatorum, and may be uſed the ſame way.

"Utraque refrigerant temperate, ſiccant valide, aſtringuntque. Uſus in-"ternus rarus eſt, nihilominus tamen adhibentur in fluxu alvi, ac expuitione "ſanguinis. Extrinſecus uſus utriuſque crebrior. Folia emendant fœtorem "ſub axillis & inguinibus (pulvis aſperſus): ſudorem corporis immodicum ſiſ-"tunt (frictione): membris catarrhoſis opitulantur, alvi fluxui ſuccurrunt, "defenſivum exhibent in herpetibus, putredinem oris ſanant, hæmorrhagiam "narium ſiſtunt, polypo medentur (cum melle ac vino). Baccæ mitigant

"oculorum

" oculorum inflammationes, juvant luxatos articulos ac ossa fracta, subveniunt " procidentiæ uteri ac ani, capitis tineas, furfuraceaque excrementa abigunt. " *Præp.* 1. Syrupus Myrtillorum seu Myrtinus. 2. Oleum Myrtillorum. Ex " foliis Myrti & oleo communi infusis." *Schrod.* 632.

1. The berries are astringent, and somewhat-vinous tasted while recent: the leaves are aromatic and fragrant, as well as astringent; so rather heat than cool. " Myrti Bœticæ fructus vinosus est, grati saporis, folia valde odorata." *Clus. R. H.* " Baccæ Myrti saporis sunt subausteri." *Nucl. Belg.* 204. But —2. They are little used here; the syrupus Myrtinus being omitted in the Pharm. *edit.* 1744.

CACAO.

SECT. I.

Cacao. *offic.* Cacao. *Clus. Ex.* 55. *T.* 660. *R. H.* 1670. *Sloani Cat.* 134. *Hist.* ii. 15. *Ger.* 1550. Cacao, sive Cacavate. *Park.* 1642. Cacao Americæ, seu avellana Mexicana. *J. B.* i. 291. Amygdalis similis Guatimalensis. *B. P.* 442. Arbor cacavifera Americana, cujus fructus folliculo incluſus amygdalorum speciem refert. *Pluk. Alm.* 40. Theobroma, foliis integerrimis. *H. Cliff.* 379. The Caco-tree.

It grows in several hot countries of America, and is also carefully cultivated. You have father Plumier's description of it in Mr. *Geoffroy's M. M.* ii. 410. and its botanical character in *Linnæi Gen. Plant.* p. 367. For the culture, crop, profits, &c. vid. *Savary's Dict.* i. 500. and iii. 118. The seeds only, or nuts (called amandes, i. e. kernels, *Gall.* malè,) are used. According to Savary the profits of it are very considerable, twenty negroes sufficing for managing 50000 cacao-trees, which may yield *com. annis* 1000000℔ of amandes, worth $7\frac{1}{2}$ sols per pound, the lowest price they are sold at, which makes 37500 livres, or about 1875 l. sterling.

These nuts are about the bigness of almonds, but rounder and thicker, containing, within a browniſh thin shell, a dark reddish brown kernel, consisting of several (five or six) unequal, closely joined, but easily separated, lobes, of an oily bitterish but not unpleasant taste, and soft smell.

The chocolata of which a drink is made, which is called by the natives of Mexico chocolate, is a paste made of the kernels per se, or with the addition of some other ingredients. Savary says this paste, used by the Indians, and by the Spaniards at first, consisted of cacao, mais, crude sugar, and a little Arnotto (or Orleana. Vid. *Dale* 338.) to improve its colour; and served equally both for meat and drink; eating it when hungry, and drinking it, sufficiently diluted with hot water, when troubled with thirst. That it is the liquor made of this paste, which the Mexicans call properly chocolate, if it be true that it is compounded of choco, signifying in their language sound or noise, and alte or atte, water, *quasi* a sounding-water, because of the noise made with the stick, in preparing the drink, or milling and frothing the chocolate. The Spaniards afterwards, and other Europeans, much augmented the number of ingredients in the chocolate, which, almost all except the vanelloes (without which, says he, it is impossible to make good chocolate) rather spoil than better its qualities. Vid. *Savary's Dict.* i. 754.

Vanilia, Banilia. *offic. Dale* 340. Volubilis ſiliquoſa Mexicana, foliis plantagineis. *R. H.* 1330. Volubilis Americana, capreolata, plantaginis foliis, ſiliquis longis, moſchum Olentibus. *H. Ox.* iii. 613. Lobus oblongus, aromaticus. *Cluſ. Exot.* 72. *Cat. Jam.* 70. *Sloan Hiſt.* i. 180. Lobus aromaticus, ſubfuſcus, terebinthi corniculis ſimilis. *B. P.* 404. Lobus longus, aromaticus, odore fere Belzuini. *J. B.* 1, 2, 438. Vanilla, flore viridi & albo, fructu nigricante. *Plum. No. Gen.* 25. tab. 28. *Geoff.* ii. 362. Epidendri ſpecies. *Lin. Gen. Pl.* p. 436. Epidendrum, foliis ovato oblongis, nervoſis, ſeſſilibus, caulinis; cirrhis, ſpiralibus. *Roy Lugd.* 13. *Sp. Pl.* 952. Volubilis ſiliquoſa, plantaginis folio. *Cateſb. Car.* 3. p. 7. The vanelloes or banilas are dark brown flat pods, about ſix inches long, and half inch broad (ſcarce an inch broad. *Mil. Bot.* 75. " quatuor lineas lata. *Geoff.* rectius) full of very ſmall black ſhining ſeeds, of an oily aromatic taſte, and fragrant ſweet ſmell, reſembling benzoin or balſam of Peru much. It is brought from Jamaica, New Spain, and other parts of the Weſt Indies. It is reckoned very cordial and carminative; but chiefly uſed for its flavour in chocolate. Vid. *R. H.* and *Geoff.* l. c.

" In Jamaica Cacao nuclei craſſe contriti in panes, ſeu maſſas librales, aut " bilibres, trilibreſve efformantur abſque ulla mixtura." *R. H.* 1672. who has more than three pages on this ſimple; on which many treatiſes have been written: about twenty-ſix are mentioned in *Seguierii Bib. Botanica.*

SECT. II.

It is an antacrid, incraſſating, and nouriſhing ſubſtance; called ſtomachic and aphrodiſiac; and commended for coughs, heat of urine, leanneſs, conſumptions, &c. but more uſed for food than medicine.

" Virtutem amygdalarum, pinearum, & piſtaciarum æmulantur; vim ha- " bent nutriendi adeo potentem, ut, ex quorundam ſententia, carnibus omni- " buſque aliis alimentis ſint anteponendi (hi nuclei). Vis omnis conſiſtit in " mucoſa blanda & oleoſa ſubſtantia, qua totus fructus ſcatet." *Herman. Cynoſ. Boecler.* p. 384. " Abundat oleo craſſo & balſamico, unde bene nutrit, & " humores acres inviſcando temperat; conducit ad tuſſim & phtiſim, ſtoma- " chum roborat, & valet in morbis ubi opus eſt adſtrictione." *Nucl. Belg.* 52.

1. They are very oily, farinaceous, and ſomewhat mucilaginous; neither acrid nor ſtyptic." " Saporis ſubamari & ſubauſteri." *Nucl. Belg.* " Sub- " amari, & leviter acerbi, non ingrati tamen ſaporis." *Geoff.* ii. 409. " Sa- " poris ſubpinguis oleoſi, & ſubamari; odoris nullius." *Herm. Cynoſ.* l. c. *Dale* 328. " Nuclei probe curati, guſtu ſubamari ſunt, nec tamen ingrati & " pingues ſeu oleoſi, calore temperati; ut nonnullis videtur ſicci & aſtringen- " tes, quod non probat Hugheſius, uti nec Piſo. *R. H.* 1671. " Ex fructus " Cacao contuſi & calefacti ℔j. olei ℥ij. exprimuntur: ex fæce poſtquam una " cum aqua ebullit, olei craſſioris ℥iij. ʒijß. prodierunt, ita ut ſumma olei, per expreſſionem extracta fuerit ℥v. ʒijß." Vid. *Geoff.* ii. 412. where he ſays alſo that fructus ℔j. by means of boiling water, yielded of a pinguedo ℥ix. ʒß. which turned hard and white like tallow.—2. According to Le Febure, &c. " Nucleorum Cacao non decorticatorum ℥viii. yielded of phlegm " and ſpirit ℥j. olei rubicundi, in frigore inſtar butyri ceræ craſſeſcentis, ℥iijß. " carbonis ℥ij. ʒvij. reliqua materia in operatione aſſumpta." *R. H.* 1673.

Here

Here is no loſs, but ʒiij. too much. In the Bib. Pharm. it is ſpiritus ʒj. only. " Si ex retorta debite deſtilletur, ſuppetit phlegma inſtar juſculi carnis; ac " ejus ſpiritus & oleum redolet pinguedinem ex aſſata carne deſtillantem." *Herm. Cyn.* " Analyſi chymica ex nucleorum Cacao crudorum & contuſorum, " teſtis rejectis, ℔ij. varii liquores utroque ſale, acido & acri, permiſti exie- " runt ad ʒvj. circiter. Olei vero primum tranſlucidi, dum calens eſt; dein " conſiſtentiæ butyraceæ, dum refrigeratur, rufeſcentis, ſapore acri pungente, " & odore ſubtili, ʒxiv. Maſſa nigra in retorta remanens pendebat ʒx. ex " qua rite calcinata ſalis fixi ſalſi ʒiv. extractæ fuerunt. Partium in deſtilla- " tione abſumptarum pondus fuit ʒij." *Geoff.* ii. 411. According to Le Febure, &c. as quoted in *R. H.* " Oleum mirifice pungit & penetrat, eſque " valde aromaticum. Spiritus brevi aceſcit." *Is* Mr. Geoffroy's *Analyſis made out of* Mr. Ray's *H?*—3. " Admodum refrigerat, ita ut aqua ſoluta frigida " (or perhaps it ſhould be *& frigida aſſumpta*) calefieri nequit intra duas horas in ventriculo; hinc non convenit nobis." *Albin. M. S.*—4. It is much commended by ſome, while others condemn the uſe of it almoſt all together. " Chocolata bona & rite parata, frigido ventriculo multum prodeſt, omnia " viſcera corroborat, unde phthiſi caute adhibita ſæpe medetur. Venerem " valde proritat. . . . Novi virum qui phthiſicus, & pene deploratus, ad cho- " colatæ uſum ſe recipit: uxor etiam, ut viro complaceret, eandem bibit; " miro utriuſque ſucceſſu. Nam vir brevi convaluit: mulierque prius effœta " habita, ex eo gravida, filios peperit tergeminos, omnes vitales." *Mundy de potulentis* (in his βιοχρηστολογια, &c. *Oxonii* 1680. in 8vo.) cap. 13. p. 350. On the other hand it is ſaid to breed obſtructions in the viſcera; being a glutinoſum pingue; and inſtances given of its having had this effect ſeem to confirm this opinion. But *Sponius* judiciouſly determines the controverſy, which take in his own words: " A chocolata abſtinere debent juvenculæ chloroſi " laborantes, aliique omnes obſtructionibus affecti. Ultimis hiſce annis in " hac urbe, apertum eſt cadaver cujuſdam viri, qui nimium Chocolatæ in- " dulgebat, in quo reperti ſunt in fellis cyſtide, viginti ſaltem calculi, quos " non immerito hujuſce liberalioris potus ſoboles eſſe putarunt. Nihil hæc " ipſi derogant. Moderatum uſum (ut Hiſpanus doctor Marradon Chocolatæ " minime amicus) improbare nolemus. Imo detrimentum quod aliquando " adfert, probat invicte ejus emolumentum, ubi corpus in ſtatu verſatur op- " poſito. Sic quia viſcidis ac gypſeis exiſtentibus humoribus, non convenit, " merito concludendum, ubi nimium fluidus & acris eſt ſanguis, utilem fore, " ipſius ſcilicet incraſſatione & temperatione. Proindeque tuſſi importunæ, " febri hecticæ, diarrhœæ, & ſimilibus morbis curandis non imparem." *Bib. Pharm.* i. 444. Hence I think it more proper for the old than the young, (there are two very old men mentioned by Mangetus, l. c. who almoſt lived on it a long time); for hot than cold climates and conſtitutions; for the laborious than the ſedentary; or, in a word, where the fibres are rigid, or juices acrid and volatile, than in oppoſite circumſtances. How much its nature may be altered by the manner of preparing it, and the ſubſtances mixed with it, let others inquire; I am concerned only with the ſimple. An ounce of it with ʒß ſacchari, and aquæ bullientis ʒvj. or viij. well mulled, is, I think, a ſufficient doſe. " Hiſpani Chocolatam ſumpturi, prius frigidæ hauſtum bibunt. " Cum vero ſumpſerint, horam aut amplius a frigida abſtinent. Mane com-

" modiſſime bibitur moderata doſi ad ʒv. aut vi. Sub horam ſomni ſumptus " nocet." *Mundy*, l. c. ſix ounces of whoſe chocolate (conſiſting of eight parts water, one part of the paſte or maſſa, and half a part of ſugar) will not contain ʒvß of the ſolid chocolate.

CARPOBALSAMUM. *Vide* Balſamum.

CARYOPHYLLI.

SECT. I.

Caryophyllus. Carophylli aromatici. *off.* Caryophyllus aromaticus, fructu oblongo. *B. P.* 410. *T.* 661. *Breyn. prod.* ii. 25. *R. H.* 1508. Caryophyllus. *Cluſ. Exot.* 16. *Lin. Gen. Pl.* 233. *H. Cliff.* 207. Caryophylli. *Park.* 1577. Caryophylli veri Cluſii. *Ger.* 1535. Caryophylli Indici. *J. B.* 1423. The Clove-tree.

It grows in the Molucca iſlands. The unripe fruit, or rather florum calyces, *T.* or fructus germina, ſeu embryones, are the Carophylli. *offic.* or cloves, which reſemble thick ſhort nails, ſomewhat flatted, with four little horns on the top, ſupporting a ſmall round flower-bud, which eaſily falls off, of a dark brown colour, of a very hot ſpicy taſte, and fragrant aromatic ſmell. When the cloves are left on the trees, they ſwell and become the fruit, and are then called antophylli, which (quod mirum) are neither ſo aromatic, nor ſo oily, as the cloves, therefore are not uſed.

The Dutch have long (*viz.* ſince 1638.) been intire maſters of the clove trade; and from them all Europe is furniſhed. " This tree was formerly " very common in the Molucca iſlands, where the European nations, which " traded in ſpiceries, furniſhed themſelves with what quantity of cloves they " wanted. At preſent it is found only in the iſland Ternate; the Dutch, jea- " lous of this commerce, and to become ſole maſters of it, having eradicated " all the clove-trees of the Moluccas, and tranſplanted them to Ternate: ſo that " whoever would have this uſeful commodity, are forced to take it through " their hands." *Savary's Dict.* ii. 231. He mentions what quantity of cloves *Tidor*, *Motir*, *Machiam*, and *Bachiam* furniſh. *Theſe* with *Ternate* are the Leſſer *Moluccas*; of all which the *Dutch* are maſters.

" Fructus qui καρυοφυλλον, ſive καρυοφυλλος (i. e. nucifolium) dicitur, nec " Dioſcorides nec Galenus meminiſſe videntur, licet Serapio Galenum falſo " citet, forſan rectius Æginetam, vel Sethi nominaturus. Apud Plinium, " l. 12. c. 7. hæc leguntur, *eſt etiamnum in India piperis grani ſimile, quod vo-* " *catur Garyophyllon grandius fragiliuſque:* verum hunc Plinii aliqui κωμακον " Theophraſti, l. 9. hiſt. eſſe putant: Comacum, inquit, ex India & Arabia " deportatur, ad unguenta idoneum eſt." *B. P.* Theophraſtus's words are, as rendered by Bod. l. c. " Cætera autem odorata, quorum in aromatibus " uſus partim ex India advehuntur, ac inde mittuntur ad mare; partim ex " Arabia deportantur; ut cinnamomum & caſia, atque etiam κωμακον, cujus " genera duo; horum alterum fructus: alterum unguentis pretioſiſſimis ad- " miſcere ſolent." Vid. *Bod.* (in *Theoph.* p. 1009. 2.) who thinks the coma-

cum fructus is what we now call cubebæ, which in Java is ſtill called cumuc. Vid. *Garc.* l. 1. c. 23. *Cluſ. Exot.* 184. However there is no reaſon to believe that our Caryophyllus is the Garyophyllum of Pliny, who adds to what is above cited, " Tradunt in Indico luco id gigni. Advehitur odoris gratia."

" Caryophyllon non pro nominis ratione etiam ſubſtantiam habet, quum " folium nucis illo ſignificetur verum ex India velut flores quidam arboris, " feſtucarum ſpeciem præferentes, nigri, digiti fere longitudine, afferuntur, " aromatici & acres, ſubamari, calidique ac ſicci circa tertium ordinem. Hi " multiplicis uſus ſunt tum in obſoniis, tum in aliis medicamentis." *Paulus*, l. 7. p. 624. *H.* " Apud Serapionem Carunfel eſt Garyophyllus (ita enim " ſcribit interpres) qui annotat cum Paulo, aliam eſſe ejus eſſentiam, quam " nomen ipſum exprimat, quod folium nucis denotat. Adferri ex Indiæ locis " ſimilem flori ſuæ arboris, eſſe veluti lignea quædam fruſtilla, nigra, longi- " tudine tranſverſi digiti, odorifera, ſapore acuto, cum quadam amaritudine. " Paulum citat, eundemque eadem cum Galeno ſcripſiſſe de iis de verbo ad " verbum. Sed locum eum apud Galenum nondum legimus. Apud Avi- " cennam Garyophyllus (Charunful Bellun.) ſimilis eſt ſambuco, ſed nigrior. " Maſculus eſt veluti olivæ nucleus, longior & nigrior: fructus arboris Indiæ." *J. B.* (i. 425.) who has near ſeven pages on it. Is it the καρυοφυλλον *Pauli?* This tree has never yet ornamented an European garden. " Ne per octo qui- " dem dies vegeti in ædibus conſervari poſſunt anthophylli; ſtatim enim ex- " ſiccantur, nec unquam germinant." *R. H.* 1508.

SECT. II.

Cloves are very ſtimulating and heating, diaphoretic and carminative; called cephalic, cordial, ſtomachic; and commended internally in the vertigo, lethargy, palſy, lipothymie, indigeſtion, vomiting; *verbo*, in all cold, phlegmatic, and flatulent diſeaſes: and outwardly for the tooth-ach, paralytic members, &c. They are much uſed alſo in the kitchens; and to correct purgatives.

" Cardiacum, cephalicum, ac ſtomachicum, inſigne exhibent; calfaciunt & " ſiccant 3. diſcutiunt. Hinc proſunt in lipothymia, odontalgia, cruditate " ventriculi, vertigine; arcent quoque morbos malignos, uterinos, &c. " *Præp.* 1. Confectio. 2. Aqua. 3. Oleum. 4. Extractum. 5. Sal com. " ex remanentiis incineratis. 6. Balſamus. 7. Species diacaryophyllorum." *Schrod.* p. 558.

1. They are extremely hot, cauſing a pretty laſting and glowing heat in the mouth, which as it were agreeably benumbs the tongue a ſhort time; and are among the moſt pleaſant of the ſpiceries. " Sapor recentium fervidus, non " ſine amarore, valde tamen gratus & aromaticus (*Cordo* aſtringens quoque) " & neſcio quid ſtuporis linguæ imprimens." *R. H.* 1508. è *J. B.* " Saporis " acris, amaricantis, & grati, odoris fragrantiſſimi. . . . Adeo expetuntur & " placent, ut ſine Caryophyllis dapes fere deſpiciantur. Omnibus propemo- " dum ferculis intinctibus, vinis aut ſpirituoſis liquoribus potulentis aroma- " ticis admiſcentur. Inter odoramenta quoque uſurpantur." *Geoff.* ii. 390. " Odoris fortiſſimi, ſaporis acris, valde calidi, aromatici." *Nucl. Belg.* 65.—

2. They

2. They abound with an aromatic heavy oil, which diſcovers itſelf on the ſlighteſt bruiſe; and may be got by expreſſion, as well as by deſtillation. " Caryophyl. ℔i. yields, by a very ſimple deſtillatio *per deſcenſ.* albi olei ℥j. " ʒij. & ſpiritus ℥j. the reſiduum being ℥xiij. ʒij. whence ſome black oil " may be obtained by an increaſed heat. The oil of cloves becomes red a " few days after it is drawn. The ſpirit is red, of a pretty agreeable acid " taſte; and ſmells of cloves." Vid. *Lemery's Chym.* p. 599. But the common oleum Caryophyllorum is got by diſtilling them with water. " Mirabile " interim oleum hoc generoſſimum ſpiritibus, ſi orbi vitreolato, in aëre aperto, " paulo calidiore, exponitur, tam brevi dimittere diffuſos ſpiritus, totumque " ſuo halitu vaporare locum, deinde autem in lentum, ſpiſſum, iners, pingue " abire: quem tamen in regionis fervidiſſimæ æſtuante æſtate, ſpiritus illos " arcte retineant, tanto temporis ſpatio." *Boerh. Chem.* ii. 116.—3. Outwardly they warm and comfort the parts; and are of uſe in paralyſi linguæ, cold pains, &c. Mr. Geoffroy gives the principles, but no analyſis: and borrows (*more ſuo*) much from *R. H.* unnamed. " Adverſus omnes cerebri frigidos " affectus, vertiginem, viſus debilitatem, cephalalgiam, lipothymiam, cordis " palpitationem, ventriculi imbecillitatem, impotentiam Veneream, menſium " ſuppreſſionem, hyſtericos affectus commendantur. Aeris contagio reſiſtunt, " ſive ſuffimento, ſive eſu." *Geoff.* ii. 392.

SECT. III.

They may be given in ſubſtance to ℈j; in infuſion to ʒj; the oleum ſtillatitium to gut. iv. in ſugar, yolk of an egg, &c. This oil is an ingredient in the ſpiritus lavendulæ compoſitus, ſpiritus ſalinus aromaticus, ſyrupus de rhamno, pilulæ cocciæ, pilulæ de duobus, pilulæ Rudii, balſamum ad apoplecticos.

" The doſe of the oil is gut. ij. or iij; of the ſpirit a gut. vi. ad xx." *Lem. Chym.* 599. " Oleum Caryophyllorum eſt ſtomachicum, corroborat & flatus " diſcutit: antifebrile & antiparalyticum inſuper egregium eſt. Doſis a gut. " ij. ad x." *Le Mort. Col. Chym.* p. 327. " Doſis in ſubſtantia a gr. iij. ad " ℈j. in infuſo a ʒß. ad ʒij. Doſis olei intus ſumpti eſt guttæ unius aut alte- " rius." *Geoff.* ii. 392.

CASSIA.

SECT. I.

Caſſia fiſtularis, Caſſia ſolutiva, Caſſia nigra, Siliqua Ægyptia. *offic.* Caſſia fiſtula Alexandriana. *B. P.* 403. *T.* 619. *R. H.* 1746. Caſſia nigra. *Dod.* 787. Caſſia purgatrix. *J. B.* 1, 2, 416. Caſſia fiſtula. *Ger.* 1431. Caſſia ſolutiva, vulgaris. *Park.* 234. Caſſia fiſtula, Chai-arxambar vocata. *Alp. Aeg.* 3. Caſſia, foliolis quinque parium lanceolatis, extimis minoribus. *H. Cliff.* 158. The Pudding-pipe tree, or Purging Caſſia.

It

It is a large tree, growing in both the Indies, Egypt, &c. The fruit, or rather pulpa fructus, only is uſed. The fruit is a (two or three feet) long, ſlender dark brown pod, containing, within an hard woody ſkin, or bark, in proper cells, ſhining brown ſeeds, ſurrounded with a black pulp, of a ſweet ſubviſcid taſte, and ſoft ſmell. If the pulp is rough or aſtringent, the fruit has not been ripe enough; or if acid or dry, it is too old. "Pulpa tres notas "habet, præ nigredine ſplendet, pinguis eſt, dulcis fere ut pruna, ſed cum "aromatica quadam acredine. . . Summa quæcunque Caſſia cum dulcedine "quadam, æqualiter afficit fauces, nullo modo mordicans, illa eſt bona." *Hoffman*, p. 17. "Uno verbo qui diu dulcis eſt, tamdiu ſecurus eſt uſus ip-"ſius." *Ibid.*

"Caſſia fiſtula ab Arabibus inventa eſt, & a recentioribus Græcis, ut actua-"rio κοσσια μελαινα nominatur. Fabam Indicam veterum, ut Ariſtoboli V. "Cordus credidit. Siliquam Ægyptiacam Theophraſti 1. hiſt. 18. nonnulli "cenſent." *B. P.* It is deſcribed by Serapio, nomine Eiarxamber; and called by Avicenna, Chaiarlander. *J. B.*

SECT. II.

It is a mild attenuating antiſeptic, diuretic and purgative; called a chola-gogue; alſo pectoral and nephritic; and commended in coughs, aſthmas, gra-vel, gonorrhœa, &c. Children and pregnant women may ſafely take it.

"Medulla alvum lenit clementer, & ſine torminibus fæces educit; calidi-"tate & frigiditate temperata (*Fernel.* cal. 1.) cætera humidior; unde nec hu-"mido ventriculo, nec hypochondriacis & flatulentis, niſi ſtomachicis & car-"minativis (e. g. cinam. maſtich. ſem. aniſi) correcta, convenit. Potio ejus "grata eſt pleuriticis. *Præp.* 1. Caſſiæ flos ſeu pulpa, Caſſia extracta. Doſis "infantibus ad ʒiß. adultis ad ℥iß. in clyſteribus ad ℥ij. 2. Caſſia extracta "communis, ſive pro clyſteribus. 3. Electuarium diacaſſiæ cum manna. "4. Caſſia extracta ſine ſena. 5. Caſſia extracta cum ſena. 6. Extractum "Caſſiæ. 7. Aqua Caſſiæ. 8. Syrupus de Caſſia." *Schrod.* 758.

1. It is neither acrid, aromatic, nor nauſeous; but ſweet, ſubviſcid, eaſily diſſolving in water, and ſoon becoming ſour. "Pulpa ſaporis eſt dulcis." *J. B.* "Saporis ſubacris & ſubdulcis." *Dale* 338. "Saporis dulcis, nauſeoſi & ſub-"acris." *Albin. M. S.* "Odoris vinoſi, ſaporis ſaccharini." *Nucl. Belg.* 66. "Subdulcis, cum quadam acredine." *Geoff.* ii. 345.—2. Even the woody part of it is ſaid to be cathartic. "In omni parte Caſſiæ lignoſa eſt robuſtior facul-"tas evacuendi, quam in pulpa ipſa, quod ego expertus ſum ſæpe, & caſu "adinveni. Primis enim annis dum veni in hanc civitatem, habebam ſimias, "marem ſcilicet & fœminam, & quidam ex meis domeſticis acceperat pulpam "Caſſiæ, & domi relictæ ſunt partes illæ lignoſæ, quæ caſu projectæ fuerunt "in locum ubi erant ſimiæ, & ipſæ cœperunt partes illas lignoſas comedere, "& maximus in utraque alvi fluxus eſt excitatus. Ego exiſtimans id factum "eſſe ratione illarum fiſtularum, volui hoc experiri, & ita accepi fiſtulas lig-"noſas Caſſiæ ſine pulpa, & facto pulvere exhibui, & reperi quod maxime "evacuant: quod & alias ſæpe expertus ſum, & eo magis etiam ſolvunt ſi "optime conterantur, & cum ipſis ſemina etiam illa. Ratione itaque ligno-

" ſarum partium & ſeminum, quæ non recipiuntur in flore Caſſiæ, fit ut " Caſſia tracta magis evacuet." *Fallop. de Purg.* c. 35. p. 112.—3. " Analyſi " chymica ex pulpæ Caſſiæ Alexandrinæ ℔ij. ʒvß. prodierunt humorum ℔j. " ʒiv. ʒviß. Olei ʒiv. gr. xlvij. Carbonis ʒx. ʒiß. Unde cinerum ʒi. ʒv. " & inde ſalis fixi alcali ʒvj. gr. xij. (ergo terræ ʒvi. gr. lx.) ac jactura fuit " ʒivß. gr. xxiv." ſecundum *Geoff.* ii. 347. But here the ſum is only ℔ij. ʒiv. gr. lxxi. ſo that ʒj. ʒiij. gr. 1. are wanting to make up the ℔ij. ʒvß. which were analyſed. However Mr. *G.* well deſerves to be read on this ſimple; as he judiciouſly anſwers ſeveral objections made againſt it by ſome authors, ſuch as its being hurtful to thoſe who have been cut for the ſtone, or are troubled with heat of urine, to hyſteric and melancholic perſons, in bilious conſtitutions, &c. founded on falſe theory, and now juſtly diſregarded. " Caſſia facit ad calfactionem renum dicit Meſues, quoniam refrigerat: ſed in " ardore veſicæ malum eſt medicamentum, quia diuretica eſt, & ideo deducit " ad veſicam arenulas, & materias ſalſas & acres, quæ augent ardorem, qui " quamdiu vis Caſſiæ durat in corpore, tamdiu eſt moleſtior: verum eſt tamen " quod poſtea lenitur aliquantulum ardor." *Fallop.* l. 1. p. 113. " In calculoſis Ægyptii pro ſecreto habent cum ſaccharo candi, & pulv. glycyr. ſed " ſola hoc facit. Monardis & Matthiolus pro infallibili preſervativo habent ʒiij. " quotidie tribus horis ante prandium. . . Memini Ill. Saxoniam prolectione " dicere capitis dolores poſt cibum, non curari felicius quam Caſſia poſt cibum. " Hoc poſtea inveni apud Helideum, qui curaſſe ſe ait hoc modo pertinaciſſi- " mam ophthalmiam." *Hoffman.* p. 18. " Caſſia catharticum eſt benignum " & innoxium, omni ſexui, ætati, temperici, gravidis & puerperis conveniens. " . . Utiliter præſcribitur in febribus ardentibus & inflammatoriis, in affecti- " bus pectoris renum & veſicæ. . . . . Præſcribitur & in calculo . . . ſi aliqua " purgandi neceſſitas ſub his morbis occurrat, nullo certe medicamento minus " noxio, felicius levabitur." Thus *Geoff.* ii. 348.

SECT. III.

It may be given to ʒij. It is an ingredient in the diacaſſia, and electuarium lenitivum.

" Caſſiæ doſis eſt ʒß. ad ʒiß. Averrhoes dat a ʒx. ad ʒxv." *Hoffman.* l. c. " Doſis medullæ Caſſiæ a ʒij. ad ʒiß. decocta ab ʒß. ad ʒiv." *Geoff.* l. c. " Quærit Valliſnerius, cur ſi damus Caſſiæ pulpæ ʒxij. & ſi damus mannæ " ʒiv. equalem obtineamus lenitionem: & ſi damus Caſſiæ ʒviij. & mannæ " ʒiij. vel iv. ſimul mixtas, duplicatam purgationem obtineamus? cum con- " trarium ſequi deberet; nam plus poſſunt Caſſiæ ʒiij. vel iv. quam mannæ " ʒiij. vel iv." *Rieger.* ii. 568. The ſolution of this queſtion is tedious; and reſolved into the antipathy nature has to this tertium quid. *But I doubt of the fact.*

CERA-

CERASUS.

SECT. I.

Ceraſus, Ceraſus nigra. *offic.* Ceraſus major ac ſylveſtris, fructu ſubdulci nigro colore inficiente. *B. P.* 450. *T.* 626. *R. H.* 1538. Ceraſus ſylveſtris, fructu nigro, *J. B.* i. 229. *R. Syn.* 463. Ceraſus nigra. *Ger.* 1505. Ceraſia nigra. *Tab. Ic.* 986. Ceraſus. *Lin. G. Pl.* 215. Black Cherry-tree, or Mazzards.

It grows in woods; flowers in April; and the fruit (which is the only part uſed) is ripe in July, and called Ceraſum, or Ceraſium. "Ceraſus, κερασος "Theoph. 3. hiſt. 13. Fructus κερασια, Dioſcoridi, l. 1. c. 157. Ceraſia & "Ceraſa. Dicta autem a Ceraſunte pontico municipio: unde Lucullus Roma- "norum Imperator, Mithridate debellato, primum in Italiam arborem detu- "lit, & fructum gentilitio nomine Ceraſium appellavit, Athenæo, l. 2. & Plinio, l. 15. c. 25. auctoribus." *B. P.* 449. But Theophraſtus lived about 250 years before Lucullus. Had the town Ceraſus its name from the tree? *quod Ceraſis maxime abundet?* So ſay Lexicographers. It is now called Cheraſonda.

SECT. II.

The pulp is an aceſcent diluent; ſo quenches thirſt, reſiſts putrefaction, and opens the belly: and is ſaid to be ſtomachic. It is commended in obſtructions in the hypochondriac viſcera, putrid ſcurvies, &c. The nuclei or kernels are of the nature of bitter almonds; called cordial and cephalic, alſo lithontriptic: and are commended in the palſy, convulſions, epilepſy, gravel, &c. But they are ſuſpected of virulency at preſent.

"*Officin.* Ceraſa utriuſque generis, i. e. ſubacida rubra (amarenæ) & dulcia "nigra ſiccata: (nuclei, & gummi.) Acida refrigerant, ſiccant, aſtringunt, cor "ac ſtomachum roborant. Hinc utilia in febrili ſitu ac æſtu mitigando, &c. "Fernelius decoctum Ceraſorum in hypochondriaco affectu ſummè commen- "dat. Dulcia temperata ſunt ad humiditatem inclinantia, cephalica, unde "morbis capitis, apoplexia, epilepſia, paralyſi, &c. peculiariter proficua cen- "ſentur. Nuclei calculum comminuunt, adhibenturque contuſi in frontalibus, "unguentove refrigeranti commixti, ad dolores febriles capitis demulcendos "faciunt. Gummi celebratur vi lithontriptica. *Præp.* 1. Condita acida. 2. "Rob acidorum. 3. Syrupus acidorum. 4. Aqua ſtillat ex dulcibus. 5. "Spiritus dulcium. 6. Aqua diuretica, ex nucleis utrorumque. 7. Tinc- "tura & extractum, ex nigris. 8. Diamarenatum ſimplex, & compoſitum. "9. Oleum ex nucleis exprimi poteſt, ſed eſt minus uſuale." *Schrod.* 560.

1. They are of a luſcious ſweet taſte, with very little bitterneſs; and no ſmell: the kernel is more agreeable than bitter almonds, with the ſame flavour. "Fructus dulcis, nucleus amaricans." *J. B.* "Fructus caro dulcis, ali- "quantiſper amaricans, haud ingrata." *Geoff.* iii. 291.—2. Eaten in too great plenty they, as moſt other fructus acido-dulces, frequently bring on diarrhœas,

perhaps rather by diſſolving the juices than by fomenting or ſtimulating. Hence they are ranked by *Boerhaave* amongſt the ſapones acidi: and ſo are of uſe in ſome obſtructions of the viſcera, and atrabiliarious diſeaſes. " Ceraſia " bonam quidem alvum faciunt, ſi recentia (χλωρα) ſumantur: at ſicca eadem " alvum ſiſtunt. Gummi vero Ceraſorum, cum vino diluto ſumptum, diu- " turnæ tuſſi medetur; colorem quoque commendat, viſum exacuit, & appe- " tentiam invitat. Ex vino etiam potum calculoſis prodeſt." *Dioſcor.* l. 1. c. 157. totum.—3. The diſtilled water, which has its flavour only from the kernels, having neither taſte nor ſmell without them, has been long much uſed in England; but is now excluded the London Diſpenſatory. " Ceraſa " dulcia in morbis capitis, epilepſia, apoplexia, paralyſi proficua cenſentur. " (*Riſſus* apud *J. B.*) Dulcium nigrorum aquam ſtillatitiam a nonnullis ad " epilepſiam mirifice commendari ait *J. B.* in ipſo paroxyſmo in os infuſam. " Doſis ʒiv. aut amplius. Hæc valde celebratur, & apud matronas noſtras " frequenti in uſu eſt ad motus convulſivos, præcipue infantium." *R. H.* 1539. " The diſtilled water is of more uſe in the modern practice than any other " ſimple water whatever." *Miller's Bot.* 128. See the reaſons for baniſhing aqua Ceraſorum nigrorum in *Pemb. Diſpenſ. Narrative*, p. 76. There is ſuch an affinity betwixt the taſte of theſe kernels and bitter almonds, that I long ago ſuſpected they were of the ſame nature. And now the effects of laurel-water have opened phyſicians eyes, and procured the proſcription of both theſe waters. Vid. *Plinium*, l. 15. c. 25. p. 371. " Nonnulli ut minus noceant Ceraſa, ſi " ad ſatietatem edantur, oſſicula una deglutire jubent. Verum nobis tentan- " tibus id male ceſſit. Nam pluribus Ceraſorum una cum pulpa oſſiculis de- " glutitis, per aliquot poſt dies, gravitatem & dolorem ſenſimus in fundo ven- " triculi, ex oſſiculis ibidem reſtantibus ortum; qui ægre, nec niſi plurium " dierum ſpatio, expulſis nucleis, ſenſim tandem evanuit." *R. H.* 1540.

C O F F E.

S E C T. I.

Coffe. *offic.* Euonymo ſimilis Ægyptiaca, fructu baccis lauri ſimili. *B. P.* 428. Bon, vel Ban arbor. *J. B.* i. 422. Bon. *Alp. Æg.* 63. *Veſling in Alpin.* 21. Buna. *Ger.* 1549. Bon arbor, cum fructu ſuo Buna. *Park.* 1622. Coffe frutex, ex cujus fructu fit potus. *R. H.* 1691. Jaſminum Arabicum, caſtaneæ folio; flore albo odoratiſſimo; cujus fructus Coffe in officinis dicuntur. *Commel. Pl. Uſ.* 72. Bon. *Ind.* ii. 217. Coffea. *Lin. G. Pl.* 73. *H. Cliff.* 79. The Coffe-tree.

It grows in Arabia. " In Perſia & Arabia felice ſuccreſcit." *Dale* 317. " In Arabia felici & in Æthiopia frequens naſcitur & colitur." *Geoff.* ii. 433. " Creſcit in ſola Arabia felici, Witſenii cura, inde delatis ſeminibus, terræque " commiſſis prodiit in Java, inde in Europam tranſlata: nunc in America fe- " liciſſimæ culturæ leges ſubit, frugemque læte reddit. Hæc eſt una è tribus " iſtis myſterioſis plantis (nicotiana, thea, coffea) quas miſericors vel iratus Deus " propoſuit orbi." *H. Cliff.* 59. vid. *B. Ind.* ii. 217. where there is a fuller account of the introduction of this famous plant into Europe. Yet the year it came

came to Amsterdam is omitted. From thence *Lewis* XIV. in 1714. procured a plant " quinque pedes alta." *Geoff.* ii. 431. which was therefore at least five years old. This tree is described by Mr. Jussieu, *Mem. Acad.* 1713. in *H. Cliff.* l. c. and, from Jussieu, in *Geoff.* 432. Now it is every where well known. The fruit, or rather seed, is used, called coffe-berries.

How long the drink made of these seeds roasted has been used in Asia I cannot find; but it was not known in Europe, or little known there, before the middle of the 17th century. Yet so soon did the drinking Coffe generally prevail, that before the year 1688 there were imported to Marseilles, *com. annis*, from Arabia by Alexandria, between 5 and 6000 quintals of coffe-berries, valued from 65 to 70 livres per quintal. Vid. *Savary's Dict.* iii. 443. It is not the Buncho Avicennæ, or Bunca Rhasis, as Rauwolfius would have it: that was probably a root.

" Hoc semen fuit veteribus Græcis ignotum, Arabibusque apud quos nulla " ejus mentio ante annum 1400 reperitur. Qui enim Bunchos esse Avicennæ " existimant, nullis suam opinionem argumentis probare valent. Europæis " vero nisi ab annis 60 circiter (i. e. before 1715.) non innotuit." *Geoff.* ii. 431. so that, according to him, it came to be known in Europe about the year 1655.

This now too common drink has employed the pens of I do not know how many authors. Seguierius in his Bibl. Botanica mentions above 30 of them. " Potus Coffe in Gallia dicitur innotuisse primum Massiliæ an. 1644. ab anno " autem 1660. usum ejus publico invaluisse. Lutetiis vero in 1669 ubi nunc " tabernæ fere 300: Londini fertur prima taberna anno 1652 instituta fuisse: " & hodie earum ibi 3000 adesse dicuntur." Vid. *Rieger.* II. 365.

SECT. II.

Coffee, as it is used, is diluent, anthypnotic, and narcotic; equally salutary or noxious as Tea, according to the circumstances of the drinker. " Coffa " moderate sumpta eis qui sunt frigidæ constitutionis, & plenioris corporis " habitus, sæpe prodest. Sed biliosis, melancholicis, & sanguine crasso præ- " ditis, minime convenit. Nam sanguinem particulis adustis vitiando, nutri- " tionem impedit, spirituum meatus obstruit, & semen minuit; unde non- " nullis istiusmodi nimius ejus usus paralysin, aut Veneris impotentiam, at- " tulisse observatur." *Mundy*, p. 352.

" Viscida dissolvit & ad urinam disponit, suppressos torpidosque spiritus sus- " citat, & alacres ad obeunda munera reddit. Conducere videtur potius obe- " sis & crassis pituitosis vel phlegmaticis, quam biliosis & macilentis, & quo- " rum spiritus inquieti & nimis agiles. In Persia ustulantur cortices, seu tegu- " menta granorum... Raro cortices ad nos transferuntur, alias eorum infusum " multo præstantius." *Herman. Cynos.* p. 324.

1. They are of a leguminous, subviscid, and somewhat bitterish and disagreeable taste, without smell. The pulp is viscous, sweetish and unpleasant. But the roasted berries are pretty bitter, have a peculiar flavour, and strong, penetrating, diffusive scent, which, when they are almost done enough, is perceived at a considerable distance. " Cortex levi quadam aciditate, nucleus

" evidente amaritudine linguæ ſenſum haud inclementer afficit." *E. Veſlingio. R. H.* " Nucleus ſaporis amaricantis & ingrati." *J. B.* " Baccæ ſaporis " farinacei, odoris fabarum toſtarum inſtar." *Dale* 317. " Caffe fructus ſunt " ſubſtantiæ farinaceæ ſaporis leguminoſi; uruntur ad uſum, & fiunt magis " amari." *Nucl. Belg.* 53. " Saporis farinacei leguminoſi, odoris fere expers." *Geoff.* ii. 431.—2. Coffe has been ſeveral times chymically analyſed; but authors differ very much in the proportions of the ſubſtances it thus yields. (α) Acccording to Dufour, as related in *R. H.* p. 1692. ℔j. of good clean coffe yielded phlegmatis & ſpiritus ʒivß. olei craſſi ʒij. ʒv. carbonis ʒiv. which, added together, make ʒxj. ʒj. ſo that ʒiv. ʒvij. were loſt or diſſipated in the diſtillation. " Adeo ut quarta fere pars (ſays he) inter deſtillandum abſumpta " evanuerit, quamvis vaſa exacte commiſſa, & cemento inducto clauſa eſſent; " argumento non inefficaci coavam multas particulas egregie volatiles & pene- " trativas in ſe continere, quibus ut veriſimile eſt, ſomnum arcet." But here ʒvij. (more than a fourth part) are loſt; and the cap. mort. afforded only ſalis fixi ʒiß. (β) According to *Geoff.* 433. tom. ii. " Ex ſeminis Coffe ℔i. prodie- " runt liquorum ʒvj. ʒiv. gr. lviij. olei ſpiſſioris ʒij. ʒvj. gr. xxij. carbonis ʒiij. " ʒv. gr. xlviij. unde cinerum ʒiv. gr. xxix. ac inde ſalis fixi alcali ʒij. gr. " lxviij. (ergo terræ ʒj. gr. xxxiij.) & jactura fuit ʒij. ʒvij. gr. xxviij. (ſum- " ma ℔j. gr. xij.) (γ)." According to *P. Newman*, (as related in Rieger's Introd. 2. p. 352.) " Coffe mundæ ℔j. dedit ſpiritus ʒv. ʒvß. olei ʒvj. ʒß. " carbonis ʒiv. ʒij. ac inde ſalis fixi ʒiij." ſum. ℔j. ſo that nothing was loſt. *(Not probable!)*

" Præter hanc analyſim, altera quoque in academia regia ſic inſtituta fuit:" ſays Mr. *Geoff.* ii. 434. Here he ſays, hujus ſeminis ℔iij. rite torrefactæ loſt ¼ of their weight; and ſo were reduced to ℔ij. ʒiv. which, powdered and boiled in aquæ ℔ 72. and the decoction poured off clear, and diſtilled B. V. yielded " Liquoris primum inſipidi, dein ſubacidi & tandem acidi fortis ℔lx. ʒix. " In alembice maſſa ad extracti ſolidi conſiſtentiam redacto pendebat ʒxvij. ʒij. " quæ per retortam diſtillata præbuit liquoris acidi ʒv. ʒj. gr. lx. Liquoris " alcalici, cum portione ſalis volatilis urinoſi ʒij. ʒiij. gr. xxx. olei craſſioris " conſiſtentiæ ʒj. ʒv. gr. xlij. carbonis ʒiv. ʒß; unde cinerum ʒj. ʒiij. ac inde " ſalis alcali fixi cum odore & ſapore ſulphuris ʒvij. gr. lxx. (ergo terræ ʒiij. " gr. ii.) & jactura fuit ʒiij. ʒvi. gr. xlviij. (here ſum. ʒxvj. ʒij.) Hujus " tincturæ analyſi patet ſeminis Coffe torrefacti ʒß. continere extracti ſpiſſioris " ʒj. gr. lxviij. ſalis acidi gr. l. circiter; ſalis vol. urinoſi gr. viij; olei gr. " xiii." (If there was extracti ʒxvij. ʒij, Coffe torref. ʒß. contains of it ʒj. gr. lxvi: if extracti only ʒxvj. ʒij. the half ounce contains but ʒj. gr. lvj. wherein are olei gr. xij. + ⅕ grani, and near ſalis fixi gr. viij. with terræ gr. iij. nearly; but how he calculates the acid and vol. alcali, I ſee not.) " Verum " pulvis poſt decoctionem extractus, rite exſiccatus ʒxxiij. ʒvj. tantummodo " pendebat; & proinde pulveris toſti ʒxij. & amplius, in decocto ſolutæ fu- " erunt. Hujus pulveris inſtituta per retortam diſtillatione, tranſierunt liquo- " ris ʒv. ʒj. gr. xliv. olei craſſioris ʒvj. ʒvijß. ſalis volatilis gr. xxxviij. Ex " retorta extractæ fuerunt maſſæ nigræ ʒviß. unde cinerum ʒiv. gr. xxiv. ac " inde ſalis fixi ſalſi gr. xxiv. (ergo terræ ʒiv.) & jactura fuit ʒv. gr. xxvj. " (ſum ʒxxiij. ʒvj.) Ex his analyſibus concludi poteſt ſemen Coffe oleo po- " tiſſimum craſſiori empyreumatico, ſed admodum rareſcibili, & particulis ig-

" neis,

" neis, per torrefactionem imprægnato, cum portione ſalis volatilis urinoſi non " mediocri conjuncto, energiam ſuam debere." Thus *Geoff.* ii. 434, 435. Granting all this, we only ſee the crude Coffe loſes $\frac{1}{4}$ in roaſting; and, roaſted, another $\frac{1}{4}$ in boiling: and yet neither roaſting nor boiling diveſts it of the greateſt part of its oil and ſalts: and conſequently what is thrown away, according to his concluſion, retains more of that to which it owes its energy, than the liquor that is drunk.—Mr. Gellard ſays, that two pullets fed, the one with roaſted Coffe, the other with raw, became hectic both and died, the one on the eighth and the other on the twelfth day. Vid. *Mem. Ac. Roy.* 1746. —But 3. However much Coffe and Tea differ in taſte, ſmell, conſiſtence, and principles; yet their effects are much the ſame. " Sunt qui ſorbitioni Cafe matu- " tinæ cibum aliquem præmittendum eſſe ſuadent, fundantes ſe in pronuntiato " Turcarum dicentium, ſi nulla eſca ſuppetat, quæ ſorbitioni præmittatur aut " conjungatur, globum veſtiarium ex toga deglutiendum, aut a potu abſti- " nendum eſſe. Et certe multos a potu Cafe, jejuno ſtomacho ſumpto, & " uſu ejus continuato, male ſe habuiſſe, emaciatoſque fuiſſe conſtat. Novi " ipſe quendam, qui ab uno aut altero, minore quoque (poculo) potus Cafe, " tempore matutino hauſto, vertigine ſtomachica, unà ſcotomia corripitur, " quæ non ceſſat niſi aſſumpto cibo." *Boecler. in Cynoſ. Herm.* p. 326. I myſelf found theſe effects of Coffe taken in the morning for breakfaſt, though I took plenty of milk, bread, and ſugar with it: it affected not only the eyes, but the tongue alſo; and likewiſe cauſed a ſtupor in the fingers of the right hand; all which went off at dinner. It was in January 1740, and two hours after I took the Coffe before the ſcotomia began. I never ſince took a breakfaſt of Coffe, nor was ever vertiginous ſince. Hence there is ſomething in Coffe as well as in Tea, which we may, I think, call narcotic, though it has not this effect on every one; and all its good effects are owing to the warm water and ſugar, &c. taken with it.—4. *Dr. Willis*, (*Pharm. Ration.* p. 1. ſect. 7. c. 3.) obſerves, that exceſſive Coffe-drinkers are commonly lean, paralytic, & ad Venerem impotentes. " Obſervavi multos, ſpirituum copia " haud ſatis uberi præditos, ac inſuper cephalalgiæ, vertigini, palpitationi " cordis obnoxios, artuumque tremori, aut ſtupori, a potu Coffe ilico dete- " rius habuiſſe, quoad iſtos affectus, & ſtatim in toto corpore languorem in- " ſolitum perſenſiſſe." *R. H.* However it certainly gives conſiderable relief in headachs after drinking, diverts from ſleep, and may be of uſe in ſoporoſe diſeaſes, and the gravel. " Quidam correptus eſt cholera atrociſſima, convul- " ſionibus valde dolorificis utriuſque cruris ſtipata, ac ab hac interna cauſa " exorta, quem breviſſime & feliciſſime ſanavi ſolo potu calido Coffæ copioſe " aſſumpto, qui retinebatur in ventriculo; tinctura opii, aqua menthæ, ſero " lactis, cerviſia, vino, per vomitum rurſus ejectis, & fruſtra uſurpatis. E " *Muis* podalirio redivivo." *R. H.* 1692. *An a narcotica ejus qualitate?* Mr. Juſſieu, l. c. ſays Coffe exhilarates, invigorates, and diſſipates melancholy thoughts, as effectually as the nepenthes Homeri. *Who told him what the nepenthes was?* The French cuſtom of taking a cup of Coffe immediately after dinner, which is now much followed by our people of quality and faſhion, I think the ſafeſt way of uſing it: Coffe toſtæ pulv. ℥j. is enough for aquæ ℔ij. it is certainly ſafer than the cuſtom of taking drams of what they call ſurfeit waters. N. B. One ounce of Coffe is ſufficient for a quart of water.

LECTURE LXIV.

COLOCYNTHIS.

SECT. I.

Colocynthis, Handel. *off.* Colocynthis fructu rotundo minor. *B. P.* 317. *T.* 108. Colocynthis. *Dod.* 665. *J. B.* ii. 232. *Ger.* 915. *R. H.* 642. *H. Ox.* ii. 27. Colocynthis vulgaris. *Park.* 160. Cucumis ſpecies eſt. *Lin. Gen. Pl.* p. 467. Coloquintida, or Bitter-Gourd.

It is a round, ſpongy, light, dry, white, ſubſtance, covered with a thin membrane, and full of oval flattiſh ſeeds, being the fruit of the bitter gourd (freed of its outward hard ſkin or ſhell) which is of the ſize and colour of an orange. This dried pulp, which is the only part uſed, is of a moſt bitter, acrid, and nauſeous taſte, with little or no ſmell.

It is brought from the Levant. "Affertur ex Ægypto." *Schrod.* 760. "Ex Aleppo adfertur." *Dale* 165. "All the world knows that the Colo-"cynth is the fruit of a wild gourd, which grows in the Indies." *Bolduc Mem. Acad.* 1701. "It grows in Turky, whence it is brought to us." *Miller's Bot.* 145. "Preceding 1688. there were *(com. an.)* imported to Marſeilles from "Cyprus (Chipres) between 80 and 100 quintals of Colocynth, valued from "60 to 70 livres the quintal; and conſumed in France, England, Spain, "Holland, Portugal, and Italy." *Carfueil, Savary's Dict.* iii. 455. "It is "cultivated in ſeveral places of the Levant." *Lem. Dict.* 159. "Ex Aleppo "affertur. . . Naſcitur in inſulis maris Ægei, & ora maritima orientali." *Geoff.* ii. 334. It is eaſily raiſed on a hot-bed, but I could never bring it farther than the flower. "The iſland Milo produces wheat, barley, cotton, "melons, gourds, Coloquintida, &c." *Thomſon's Travels*, p. 291.

"Colocynthis (κολοκυνθις) aliis cucurbita ſylveſtris (κολοκυνθα ἀγρος) aliis "cucurbita amara (σικυαν πικραν), aliis cucurbita Alexandrina (κολοκυνθα "Ἀλεξανδρινη), ſarmenta foliaque emittit per terram ſtrata, ſativi cucumeris "ſimilia, inciſuris diviſa, fructum vero rotundum, mediocris pilæ magnitu-"dine, vehementer amarum: quem legere oportet, cum cœperit ad pallidior-"em colorem vergere. Fructus medulla purgandi vim habet, ſi ejus quatuor "oboli ex aqua mulſa ſumantur." *Dioſcor.* l. 4. c. 178. p. 315. which agrees pretty well to our plant. Κολοκυντις ἀγρια is often in Hippocrates, alſo κολοκυνθη ἀγρια, ordered as a purger of water, pituite, and bile. It is thought to be the wild gourd mentioned 2 *King.* iv. 39. Diſſentit *Celſius Hierob.* i. 393. "Colocynthis, *offic.* Σικυωνη & σικυωνης σπογγον. Hippocratis: Haan-"thal *Arabum*, Kandel *Serapionis.*" *Geoff.* ii. 334. "Qui confundunt (Co-"locynth.) cum τω σικυς, ignorantibus accenſendi ſunt: eſt enim cucumis. "Eidem culpæ affines ſunt, qui σικυωνην, ἀσικωνιαν, Colocynthide jungunt." *Hoffman.* p. 19.

SECT.

SECT. II.

It is a very violent, irritating, and dangerous cathartic, apt to bring on ſuperpurgations and other bad ſymptoms; called a phlegmagogue, ſaid alſo to evacuate bilious and melancholic humours; and commended in inveterate head-achs, vertigoes, apoplexy, epilepſy, madneſs, aſthma, dropſy, lues Gallica, lethargy, &c.

" Fructus medulla arida pituitam craſſam ac glutinoſam ex profundioribus " & remotioribus partibus expurgat, ut ex cerebro, nervis, juncturis, pul- " monibus; unde cum commodo exhibetur vertiginoſis, hemicranicis, epi- " lepticis, apoplecticis, ſcabie & lue Venereæ afflictis. Calida eſt & ſicca 3. " Verum ob vehementiam & amarorem, & quia ventriculo & inteſtinis noxia " eſt, rariſſime in ſubſtantia, & non niſi robuſtis imo decenter correcta, ex- " hibetur. Corrigentia illa ſunt cuminum, tragacantha, maſtiche, bdellium, " & ſimilia cardiaca, hepatica, ſtomachica. Doſis in ſubſtantia a gr. vij. ad " ℈j, in clyſteribus (in petia) ad ʒß. *Præp.* 1. Trochiſci Alhandal. 2. In- " fuſum trochiſ. Alhan. ſpiritus vitæ aureus Rulandi nonnullis. 3. Ex- " tractum colocynthidis. N. B. Præſtat cum aliis purgantibus miſcere, ut " illis ſtimulo ſit, quam ſolum exhibere. Doſis a gr. iv. ad x." *Schrod.* 760. Vires hæ ê *Meſue.*

1. It is exceſſively bitter, very nauſeous, and acrid. " Pulpa leviſſima, " amariſſima, horrendo & ingenter amaro guſtu, fauces, viſcera, inteſtinaque " lædens, teſte Lobelio." *J. B.* " Saporis acris, amari, & nauſeoſi." *Herman. Cyn.* 333. " Saporis eſt amariſſimi & intollerabilis." *Nucl. Belg.* 85. " Sa- " pore intenſe amaro, acri, nauſeoſo, fauces lædens." *Geoff.* ii. 334. " The " kernel of the ſeeds is oily and of a ſweet taſte: the pulp is very nauſeous, " acrimonious, and extremely bitter." *Lewis's Diſp.* p. 24.—2. It contains ſulphureous as well as ſaline and mucilaginous parts; both of which are acrid, but neither ſo efficaciouſly cathartic ſeparately as when conjoined; both yield their virtue to water. Pulpæ ʒviij. gave of extract by ſpirit of wine ʒß; and the reſiduum by water ʒij. but the ſame quantity of pulp, extracted firſt with water, afforded extracti ſolidi circiter ʒiij. the reſiduum containing nothing diſſolvable in ſp. vini. vid. *Bolduc. Mem. Acad.* 1701: Where he ſays alſo, that the ſpirituous water, diſtilled from the pulp well fermented with muſtum, is bitter and purgative; but without fermentation nothing riſes but an inſipid uſeleſs phlegm by ſimple diſtillation. See *Quincy*'s objection againſt the ſpirituous waters being purgative and bitter. *Pharm.* p. 180. " Aloe & colo- " cynthis, fermentationem paſſæ amarorem amiſiſſe Wedelio obſervantur. " *Act. Lipſ.* 1686. p. 366." *Boer. Chem.* ii. 184.—3. " Analyſi chymica ex " pulpæ Colocynthidis, a ſeminibus ſeparatæ, ℔ij. ʒvij. (=ʒxxxix.) prodie- " runt phlegmatis limpidi, inſipidi & inodori ʒix. ʒviß. (ſolutionem tum " ſublimati turbidam fecit) liquoris empyreumatici, ſubrufi, tum acidi, tum " urinoſi ʒiij. ʒiß; ſpiritus urinoſi ʒj. ʒvß. (ſo humorum ʒxv. ʒß.); olei " fœtidi, amari, acris, ʒij. gr. xij; carbonis inſipidi ʒx. ʒivß. unde cinerum " ʒiv. ʒiß. ac inde ſalis fixi alcalini & cauſtici ʒiij. gr. lx. (ergo terræ ʒiij. " ʒvi. gr. xlviij.) & jactura circiter fuit ʒxij. ʒj." ſecundum *Geoff.* ii. 335.

" But the ſum total is ℥xl. ʒvj. gr. xii. ſo that there are ℥j. ʒvj. gr. xij. too much. Here is an incredible jactura, and much earth; though Mr. Bolduc found nothing remarkable or ſingular in the analyſis.—4. However acrid and irritating it be, it does not appear to be either corroſive or narcotic. " Per " decem dies macerato in aqua communi frigida malo Colocynthide, infuſio- " nem, quæ amariſſima erat, percolavi, & quatuor in eam lumbricos im- " merſi. Omnes intra quatuordecim horas interierunt. In eadem infuſione, " cui par aquæ copia addita eſt, alii lumbrici intra 24 horas extincti ſunt. " Nonnulli vero qui in hanc infuſionem per duas horas immerſi fuerant, inde " educti, & intra terram poſiti, ibi decem dies & amplius incolumes manſe- " runt." *Redi de Animalculis, &c.* p. 161. Worms died in fifteen hours in an infuſion of ſena. *Ibid.* p. 162. but much ſooner in ſeveral ſimple waters. Vide *Gramen*, ſupra. Hence it does not appear to be very anthelmintic. Hence alſo it differs much from cucumis aſininus & helleborus.—5. Outwardly applied it is ſaid to purge. " Eſt medicamentum viroſiſſimum, & " tantum non mors ipſa, ut prophetarum filii clamant. Non tantum enim " κακοστομαχον eſt, ſed & abraſis inteſtinis dyſenterias facit. Violentiam ip- " ſius vel hoc indicat, quod ſolo tactu & odore, abunde & cum magna per- " turbatione alvum dejicit, quod experiuntur qui eam pinſunt aut alioquin " tractant. Non tantum enim validiſſime concutit totius corporis habitum; " ſed exagitat etiam, vi ſua malefica, omnia viſcera, præſertim cor & hepar, " quantumvis diligenter præparetur & corrigatur. . . . Non curamus graves " morbos, quia nunquam expedimus nos a lenientibus. In his tamen malis, " non ſubito oportet provolare ad Colocynthidis ſubſtantiam per os dandam. " Quæ enim in imo ventre ſunt, in iis fere ſufficit inunctio umbilici, partium- " que vicinarum. Ubi vero inunctio non præſtat quod debet, clyſteres de- " fectum ſupplent. Poſt hæc antequam ſubſtantia detur, infuſa vel decocta " præſto ſunt. Tandem ſubſtantia, ſed bene correcta. Ea vero valde operoſa " eſt. Prima & potiſſima conſiſtit in exactiſſima pulveriſatione. Niſi id fiat, " partes quædam ſubſtantiæ, inteſtinis hærentes, & vaſorum ora arrodentes, " inſtar hirudinis ſanguinem trahunt." Vid. *Hoffman.* p. 20. § 8, 9, 10. " Qui poma hæc manibus diutius tractant, aut in mortario terunt, hyper- " catharſin inde contrahere ſolent, quod etiam fit ſola inunctione ventris." *Boecler. in Herm. Cynoſ.* p. 335. Will it inflame and ulcerate the ſkin?—6. Dioſcorides commends it in clyſters for the ſciatica, palſy, and colic; but ſays ἐστι δε κακο στομαχος λιαν. Meſue is much longer on its vires and noxæ. Schroder abridges him: and he is tranſcribed or followed by moſt authors. It is a violent cathartic; and ſo may have either good or bad effects, according to circumſtances. Vid. *N. B.* p. 279.

Great noiſe has been made about correcting Colocynth. If its remaining in the primæ viæ, & irritating them is to be feared, the infuſion, decoction, or extract, with water, wine, or brandy, may be uſed. If its acrimony is to be blunted, diminiſh the doſe, and uſe it as a ſtimulus only: but ſalt of tartar and tartarus vitriolatus increaſe its acrimony. Fermenring it may injure it too much: for if lenitives or mild purgatives only are wanted, Colocynth ſhould not be uſed. If you like Riverius's way of correcting it, it is both cheap and eaſy. " Colocynthis ad cerebrum potenter expurgandum efficaciſſima eſt; " ſed ſummo amarore infenſa eſt, vehemenſque illius eſt operatio. Corrigitur

" utrum-

" utrumque infuſione in urina, ſic enim amaritudinem deponit, & fere inſipi-
" dum remedium evadit, tum vehementia illius infringitur, ut ad ʒj. tuto ex-
" hiberi valeat; ſitque excellens ad omnes capitis morbos, a cauſa frigida ori-
" undos remedium." *Prax.* l. 1. c. 15. p. 191. *a.* Urine ſeems to correct it only by extracting from it its moſt active parts. Would not water or wine do the ſame? Certainly.

The ſeeds are commonly thrown away, though perhaps not the worſt part. " Author ſemina ab uſu removet, quæ tamen ab aliis mitiora habentur, & a
" quibuſdam in ictero commendantur, præſertim ſi ſtatim deſuper aqua mulſa
" hauriatur. Sunt qui ad febres periodicas profligandas, ſemina pari numero
" pro amuleto de collo ſuſpendunt." *Boecl. in Herm. Cyn.* p. 336. " Seminis
" non tanta virulentia ad purgandum, quam medullæ: dedimus namque mul-
" to majorem doſim quam medullæ, majore commodo, nullo aut longe minore
" tumultu." *Lob. Adv.* p. 287.

SECT. III.

The doſe is commonly ϑj. in ſubſtance: though ſome give ʒß; while others do not exceed gr. x. vel xii. It is an ingredient in the pilulæ cochiæ, pilulæ de duobus, pilulæ rudii, & unguentum vermifugum.

The doſe in Dioſcorides is oboli iv. = ϑij. in Meſue (l. 2. Simpl. c. 4. p. 53.) a ſiliquis vj. ad x. = a ϑj. ad gr. xxxiv.—$\frac{1}{3}$ grani. " Colocynthidis doſis in
" ſubſtantia, ad ϑß. Riolano: a gr. vii. ad xv. Horſtio & Heurnio: ad
" gr. xv. Sennerto: a gr. ij. ad xij. Rondeletio: a ϑj. ad ʒß. Fernelio &
" Duncano." *S. Paulli Q. B.* p. 579. " Doſis gr. vi. ϑß. ϑj." *Bat. Pharm.*
" Pulpa in ſubſtantia exhibetur a gr. v. ad ϑj. in decocto vel infuſo a ϑß. ad
" ʒi. ſed raro propter amaritiem. In decocto pro enemate ad ʒj. vel etiam
" pro apoplectico a ʒiß. ad ʒij. decoctis & infuſis ſp. percolatis." *Geoff.* ii. 342. who adds, " Si nimia Colocynthidis doſis exhibita fuerit ita ut hypercatharſis
" aut convulſiones ſuperveniant, vel metuendæ ſint; præcaveri poſſunt, vel
" curari, oleo tum affatim epoto, tum in inteſtina injecto." But laudanum " muſt ſometimes be added; which, indeed, I have found ſucceſsful when given alone.

CUBEBÆ.

SECT. I.

Cubebæ. *offic.* Cubebæ vulgares, nec Arabum Cubebæ, nec Galeni Carpeſium *Matthiolo. B. P.* 412. Cubebæ, *Garciæ*, *Cluſ. Exot.* 184. Acoſtæ. *Ibid.* 268. *J. B.* ii. 190. *Ger.* 1548. *Park.* 1583. *R. H.* 1813. " An arbor
" baccifera Braſilienſis; fructu piper recipiente." *R. H.* 1593? " Arbor Biſ-
" nagarica, Myrti amplioribus foliis, per ſiccitatem nigris, Cubebæ ſapore."
Pluk. Phyt. 140. *Almag.* 43. *Dale* 316. Cubebs.—Theſe are ſmall, round, wrinkled, brown grains, about the bigneſs of pepper, with a ſhort ſtalk at one end; containing a round kernel, blackiſh without, whitiſh within, but ſometimes empty broken ſhells; of an hot agreeable aromatic taſte, and ſpicy ſmell; brought from *Java*.

" Cubebæ ſunt fruticis convolvulacei *Javanenſis*, curane dicti, grana ro-
" tunda, piperi ſimilia, paulo majora, fuſca, rugoſa, ſcabra, cum appenſo
" tenui pediculo caudæ inſtar, includentia, ſub cortice tenui, nucleum parvum
" rotundum, foris nigricantem, intus albicantem; ſaporis aromatici potenter
" acris; odoris ſuavis." *Herman. Cynoſ.* 258. *Schroder*, *Lemery*, *Nucl. Belg.* *Miller*, make them rather leſs than pepper. It is a climbing plant according to *B. P. Lemery*, *Savary*, &c. " Eſt fructus racemoſus arboris cujuſdam malo
" vulgari ſimilis, foliis vero piperis, ſed anguſtioribus." *Schrod.* 575. which he ſeems to have taken from Jo. Hugo Linſcotus, or Linſchotanus; whoſe opinion Meſſ. Ray and Dale favour. Vid. *J. B.* The plant that bears them is yet undeſcribed: it is not even certain that they are the Cubebæ, or Quabebe *Arabum.* " Planta quæ Cubebas gerit ſarmentoſa eſt, volubilis, & ad ſmila-
" cem aſperam accedens; a P. Hermanno Curane dicitur; a nullo hactenus
" deſcripta." *Geoff.* ii. 376. Yet all are agreed that it grows in the iſland *Java.*

SECT. II.

They are attenuant and carminative; ſaid to be cephalic, cordial, and ſtomachic; and are commended in the vertigo, lethargy, palſy, colic, &c. alſo ad memoriam confortandam, & Venerem ſtimulandam.—They may be given in ſubſtance to ℈j. in infuſion to ʒj. They are uſed in the aqua mirabilis, and theriaca *pro carpobalſ.*—" Calfaciunt 2. complete; ſiccant 3. complete; atte-
" nuant, diſcutiunt, viſcera omnia roborant, atque imprimis caput; adeoque
" plurimis inſerviunt compoſitionibus. *Præp.* 1. Confectio. 2. Oleum ſtil-
" lat. rari uſus eſt. 3. Species diacub." *Schrod.* 575.

They are very hot, aromatic, and cauſe a laſting glowing in the mouth.
" Aliquando caſſa reperiuntur, æque efficaci, vel etiam efficaciore ſapore præ-
" dita quam nucleata, ſuavi, aromatico, acri, ſed qui piperis acrimoniæ mul-
" tum cedat, pertinaci tamen." *J. B. R. H.* " Adeo penetrante acri & aro-
" matico ſale pollent, ut in ore volutatæ, faucium & linguæ poros aperire,
" & quaſi diſſolvere videantur." *Herman. Cynoſ.* p. 259. " Sapore prædita
" ſuavi, acri aromatico, ſed qui piperis acrimoniæ multum cedat, pertinaci
" tamen, & copioſam ſalivam eliciente." *Geoff.* ii. 376. " Apud Indos Cu-
" bebarum in vino maceratarum eſt uſus ad excitandam Venerem; tum etiam
" in Java ad excalfaciendum ventriculum." *Garcias.* And are uſed in phlegmatic and flatulent indiſpoſitions of the ſtomach and inteſtines.

" Dantur in ſubſtantia a gr. v. ad viij. in infuſo ad ʒij. oleum deſtill. ad
" gut. ij. ad memoriam confortandum." *Herm.* l. c. " Doſis a ℈j. ad ʒß."
Albin. M. S. " Doſis in ſubſtantia a gr. iij. ad ℈j. maceratarum in vino vel
" alio liquore idoneo a ʒj. ad ʒij." *Geoff.* ii. 377.

DACTYLUS.

SECT. I.

Dactylus, Palmula. *offic.* Fructus eſt arboris quæ dicitur palma major. *B. P.* 506. *Boerh. Ind.* ii. 169. Palma. *J. B.* i. 351. *Dod.* 819. *Lob.* 637.

Ger. 1517. *R. H.* 1352. Palmula vulgaris & legitima. *Park.* 1546. Palmula dactylifera, seu Dactylus vulgò. *H. L.* 472. Palmula dactylifera major, vulgaris. *Jonst. Dend.* 138. *Sloane's Cat.* 174. *Hist.* ii. 111. Phœnix, frondibus pinnatis, foliolis alternis, ensiformibus, basi complicatis; petiolis compressis, dorso rotundatis. *H. Cliff.* 483. The common Palm-tree, or Date-tree.

It grows in Syria, Persia, Egypt, Arabia, Ethiopia, Barbary, Malabar, Ceylon, America, &c. "Provenit etiam in Arabia ad oram maris rubri; in Æthi-
"opia Ægypto contermina, in Iudæa, ut circa Hiericho copiose, quæ idcirco
"in S. literis, (as *Deut.* xxxiv. 3. *Jud.* i. 16. &c.) urbs Palmarum dicitur.
"Idumæa a Palmarum copia poetis celebratur: Syria quoque, & Persia Pal-
"mis fructiferis abundant." *R. H.* 1354. This is a very famous tree both in antient and modern authors. Vid. *J. B.* i. 351. ad 371. *R. H.* 1351 ad 1355. The editors of Mr. *Geoff.* M. M. have inserted more than fourteen pages from *Kæmpfer's Amæn. Exot.* fasc. 5. Very curious indeed!

"Arbor quæ φοινιξ Græcis, Latinis Palma dicitur; fructus vero δακτυλοι,
"& φοινικες Græcis, Latinis Palmulæ & Dactyli. . . . Plinio, l. 13. c. 4.
"Palmæ genera unde quinquaginta sunt. . . Fructus Dactyli in Italia; Cary-
"otæ (καρυωτιδες) vero Dioscoridi & Plinio. *Cæs.*" *B. P.* 506. For an accurate and very circumstantial description of this tree, and all its parts, with its culture and uses, I refer you to *Kæmpfer*, or *Geoff.* ii. p. 291. ad p. 306.

SECT. II.

Dates are antacrid and nourishing; called pectoral and astringent; and commended in coughs, horseness, fluxes, heat of urine, &c. They may be used any way, *& ad libitum.* They are expelled the *London M. M.*

"Dactylorum maturorum pulpa calfacit, subastringit (immaturi astringunt
"fortiter) asperitatem faucium leniunt, fœtum in utero roborant, fluxus ven-
"tris sistunt, vitiis renum ac vesicæ succurrunt. Extrinsecus conveniunt in
"cataplasmatis astringentibus & similibus. N. B. Concoctu sunt difficiles,
"capiti dolorem inferunt (in primis exiccati) crassum ac melancholicum hu-
"morem generant. *Præp.* 1. Species, seu electuarium diaphœnicon *Fernelii.*
"2. Diaphœnicum in solido, i. e. Tabellæ El. diaphœnic." *Schrod.* 640.

They are very sweet, and subviscid, without any acrimony or stypticity, and rather emollient than astringent, though the unripe fruit may be astringent. They are seldom prescribed here. "Palmulæ bene maturæ non nimium
"pingues ventriculo gratæ sunt, plurimum nutriunt, & corpus pingue faci-
"unt: verum concoctu difficiles esse, & capitis dolorem inferre, medici vete-
"res plerique omnes consentiunt. Unicus Aretæus omnia bellaria caput do-
"lore infestare scribit, præter palmulas, ficus, & uvas." *R. H.* 1354. "Est
"acerbus atque astringens . . . recentes plus siccis astringunt, sed capitis dolo-
"rem afferunt, & copiosiores in cibo sumptæ inebriant." *Dioscor.* l. 1. c. 148. p. 75. "Succum & viscidum gignunt, quo jecur, lien, aliaque viscera ob-
"structionibus implicantur; & longiori eorum usu cachexia melancholica sen-
"sim inducitur." *Geoff.* ii. 306. *Inanis metus!* Though, if this be fact, it is no objection against the use of them. Vid. *Cacao.*

FICUS.

SECT. I.

Ficus, Carica. *offic.* Ficus communis. *B. P.* 457. Ficus. *J. B.* i. 128. *Ger.* 1510. *Dod.* 812. *R. H.* 1431. Ficus ſativa, ſive vulgaris. *Park.* 1493. Ficus ſativa. *T.* 662. Ficus, foliis palmatis (fœmina) *H. Cliff.* 471. The common Fig-tree.

It grows wild in South-France, Spain, Italy, &c. and is cultivated in many countries with great care, by means whereof it is much improved. Caprification, mentioned by *Theophraſtus*, Cauſ. l. 2. c. 12. p. 246. and *Pliny*, l. 16. c. 27. p. 392. is ſtill practiſed in *Cea*, or *Zia*, and other *Archipelago* iſlands. Vid. *Voyag.* Let. 8. p. 130. *Mem. Acad.* 1705. or *Geoff.* ii. 322. It bears its flowers within the fruit, which *Cordus*, Hiſt. 184. firſt obſerved; and has two crops of figs annually.

" Ficus arbor συκη Græcis, & fructus συκα appellantur . . . *Plinius*, l. 15. " c. 18. Ficuum genera viginti novem propoſuit. . . Primitiæ fructus, tam " ſativæ quam ſylveſtris, ὀλυνθος, Latinis groſſus nominatur: ut Ficus in fur- " no, aut ſole exſiccatæ, quæ quibuſdam paſſæ dicuntur ἰσχαδες, Latine Ca- " ricæ, καρικαι Æginetæ quamvis Carica Ficus peculiaris ſpecies ſit in Syria " provenientis, ut ex Plinio colligere eſt. Sic ipſa grana in fructu, Græci " κεγχραμιδας, frumenta Plinius, l. 15. c. 19. alii Ficaria vocant." *B. P.* 456. It is Carĭca, not Carīca, or Caryca; which laſt was a kind of condimentum.—Carica & Caria.

" " Hic nux, hic miſta eſt rugoſis Carĭca palmis,
" Prunaque & in patulis redolentia mala caniſtris,
" Et de purpureis collectæ vitibus uvæ."

Ovid. Met. l. 8. v. 674.

" The dried Figs come chiefly from Spain and Portugal, being firſt cured " by dipping them in ſcalding lye, made of the aſhes of the cuttings of the " tree, and afterwards carefully drying them in the ſun, they are put into " barrels or frails; and theſe are what are only uſed in medicine." *Miller's Bot.* 197. " Ruſtici Ægei inſularum Ficus per aliquot dies ſoli exponere ſo- " lent, deinde in clibano exſiccare, iiſque pro alimento uſitatiſſimo cum pane " hordeaceo veſcuntur. Attamen Ficubus, quæ in Gallo-Provincia, Italia & " Hiſpania exſiccantur, multo deteriores ſunt; quandoquidem ex clibani ca- " lore ſaporem injucundum contrahant: igneus tamen calor neceſſario requiri- " tur ad ovula culicum interimenda, alioqui hi fructus brevi vermiculis ſcate- " rent & corrumperentur." *Geoff.* ii. 323.

SECT. II.

They are antacrid and nouriſhing like dates, only reckoned more laxative; and are uſed the ſame way; and are internally commended in nephritic pains, meaſles, ſmall-pox; and outwardly as emollient, maturating, and deterſive, for ſore mouths, tumors, &c. in decoction, cataplaſm, &c.

" Caricæ

" Caricæ calfaciunt 2. (recentes moderatius, utræque) humectant, pulmo-
" nariæ ſunt & bechicæ, arenulis renum & veſicæ medentur, venenis reſiſtunt.
" Præcipui in uſus ſunt in variolis & morbillis ad cutem pellendis; maturant,
" molliunt, attrahunt, unde & bubonibus peſtilentialibus *(innuente ſcriptura)*
" conferunt. Mulierculis noſtratibus, appropinquante partu, Ficuum toſta-
" rum eſus, ad partum facilitandum eſt familiariſſimus. Quin & familiare
" eſt ſuper Ficus ſp. vini accendere, brodiumque ad tuſſim ſedandam propi-
" nare." *Schrod.* 590.

1. It is a very ſweet and ſubviſcid fruit, neither acrid nor ſtyptic, yet deterſive. " Saporis dulcis, odoris debilis non ingrati. Acria quævis mulcent
" potius quam dactyli." *Herm. Cynoſ.* 393. " Ob lentorem manibus adhæ-
" reſcunt, & illas tamen abſtergunt, ſalis lixivialis & nitri modo." *J. B.*—
2. Externally they either diſcuſs or ſuppurate tumors, according to their nature. Of them the moſt antient cataplaſm on record was made, 2 *Kings* xx. 7. Hezekiah having died more than 260 years before Hippocrates was born.—
3. The unripe fruit, as the other parts of the plant, contains an acrid milky juice, commended for warts. Hence it differs from the palm-tree.—4. " Fi-
" cuum frequentem eſum pediculos generare, præter Galenum, Oribaſius,
" Paulus & recentiorum quamplurimi, ſibi perſuaſum habent. Quæ opinio
" & apud vulgus noſtratium viget. An experientiæ ſuffragetur dubito." *R. H.* 1433. " Obſervat tamen Athenæus, *Deipnoſoph.* l. 2. Anchimolum & Moſ-
" chum philoſophos & rhetores in Elide, huic morbo non fuiſſe obnoxios,
" licet per totam vitam, aquam bibere, & Ficubus tantum veſci ſoliti fuerint.
" Addit tamen illorum ſudorem adeo graviter oluiſſe, ut eos in balneis omnes
" averſarentur: unde S. Paulli monet illos qui hircum ſubalarem alent, ut a
" Ficuum eſu abſtineant." *Geoff.* ii. 325. Vid. *Sim. Paulli Q. B.* p. 299. Mr. *Geoffroy* (ii. 325.) adviſes to drink abundantly after eating figs, " ne in ven-
" triculo ſubſiſtant, aut in inteſtinis; mora enim putreſcunt, & febres putridas
" accendunt." (Exceſs in recent figs, as other fruits, has proved pernicious to many, though from a very different cauſe.) " Bilem fermentant & rare-
" faciunt, unde bileſcere dicuntur, ſicut mel, ſaccharum, & cætera dulcia:
" quapropter biliosis minime conveniunt; & in febribus a bile exortis, aut in
" hepatis & lienis inflammationibus vitandæ ſunt. . . Præſcribuntur N°. v.
" vel vi. pro ſingulis liquoris libris. Cavendum ne Caricæ, aut Dactyli,
" Jujubæ; Paſſulæ, Sebeſtenæ, nimia quantitate uſurpentur in decoctis, ne
" viſcidiora facta & ſpiſſiora, ventriculum gravent, nec facile urinarias vias
" permeent." Here is a needleſs caution. Are not the ſubſtance of figs, &c. more viſcid than any decoction of them? yet they are eaten ſafely in large quantities, even by children.

GALLÆ.

SECT. I.

Galla, Nux Galla. *offic.* Galls.—Theſe are commonly known, and need no deſcription. They grow on the

Quercus. *offic.* Quercus, cum longo pediculo. *B. P.* 420. *T.* 583. Quercus. *Tab. Ic.* 962. *Dod.* 823. Quercus vulgaris longis pediculis. *J. B.* 1, 2,

70.

70. *R. H.* 1385. Quercus vulgaris. *Ger.* 1339. Quercus latifolia. *Park.* 1385. *R. Syn.* 440. Quercus, foliis annuis, oblongis, ſuperne latioribus; ſinubus acutioribus, anguſtis; angulis obtuſis. *H. Cliff.* 448. The Common Oak —This grows on woods, but no Galls are to be found on it in Britain: for though they grow (as they ſay) on every kind of oak, yet not in every country; but only in ſuch as afford a proper climate for the inſect that breeds, or rather is hatched in them. We ſee even here, on the leaves of ſeveral trees, excreſcencies in which inſects are hatched. The mother-inſect wounds the part where ſhe lays her egg, or communicates to it ſuch a juice as alters the natural nouriſhment of the part, and forms a tumour which proves a proper nidus for the ovum. Such a nidus is the gall to an inſect peculiar to warmer climates, which at length eats its way out and flies off: and hence it is that galls have commonly a hole in them; and if any want it, the inſect may be found dead in them. The beſt galls come from the Levant, Smyrna, (which can furniſh annually 10000 quintals) Aleppo, Tripoli: the Gaſcony and Provence galls are much inferior. For the different ſorts of them ſee *Savary's Dict.* ii. 206. and for their ſtructure, *Malpig. Anat. Plant.* p. 112. They grow on the leaves of the oak, according to *Herman* and *Albinus* MSS. On the ſlender branches, *Lemery's Dict.* p. 232. and *Cluſ. H.* p. 18. "In- "ſecta hujus arboris gemmas, folia, ſurculos teneriores pungentes, humorem "aliquem venenoſum per vulnus inſtillant, qui tumorem præter naturam ex- "citat. Forte etiam ova duntaxat venenato & fermentativo humore delibuta, "nullo vulnere inflicto, ibidem deponunt, qui ſufficit, contagio ſolo, ſucco "nutritio alterando, & in motus irregulares compellendo." *R. H.* 1389.

SECT. II.

Galls are aſtringent; ſaid to be febrifuge; and commended in fluxes and hæmorrhages, but little uſed internally. Externally they are commended for the tooth-ach, looſe teeth, ſpungy gums, &c. but much more employed in dying and ink-making than in medicine. Doſis ad ʒj.

"Gallæ refrigerant ad receſſum uſque ſecundum, reſiccant ad tertium, & "potenter aſtringunt, partes laxiores contrahunt, imbecilles roborant, fluxio- "nes cohibent, atque efficaciter ad aſtringenda aut ſiccanda quæ opus ſunt, "uſurpantur, inquit Dioſcorides, l. 1. c. 147. Confer Ruellium de Natura Stirp. l. 1. c. 83." *Schrod.* Append. 10.

"Quercus. Folia, glandes, cortex, cupulæ glandium refrigerant, ſiccant, "aſtringunt. Uſus in fluxu alvi, uteri, ſeminis. Extrinſecus in odontalgia, "profluvio uterino, &c. *Præp.* 1. Aqua ſtillat. ex foliis Quercuum novella- "rum, Maio collectis." *Schrod.* 659.——

Galls, as every thing that comes of the oak, are ſtyptic to the taſte, and by every experiment ſtrongly aſtringent." "Sunt guſtu aſtringente & acerbo." *J. B.* "Saporis valde auſteri." *Nucl. Belg.* 121. "Saporis auſteri, acerbi, "& adſtringentis." *Dale* 275. "Guſtu aſtringente & acerbo." *Geoff.* ii. 779. Vide *Biſtortam* ſupra.

"Analyſi chymica ex Gallarum Alepenſium probe exſiccatarum ℔v. prodierunt humorum ℔j. ʒxiv. ʒß; olei ʒij. ʒv. gr. liv; carbonis ʒxxviij. ʒv. gr. liv.

"unde

" unde cinerum ʒij. gr. ij. & inde ſalis alcali ʒvij. gr. l. (ergo terræ ʒj. gr. xxiv:)
" ac jactura fuit ℔j. ʒiiß. Per hanc analyſim liquet Gallas multùm ſulphuris
" fixi & craſſi continere cum ſale ammoniacali conjuncti." *Geoff.* ii. 780. He ſays alſo, " Obſervandum Gallas vitrioli ſolutionem nigram vel potius intenſe
" violaceum efficere, dum nempe alcali ſal Gallarum ſali acido vitriolico con-
" jungitur, metallicas partes ab eo disjiciendo: tunc enim metallicæ particulæ
" liquoris fundum non petunt; ſed cum ſulphureis Gallarum particulis in
" fluido natantibus conſociantur, & ab iiſdem ſuſtinentur." But a ſolution of ſoap and of vitriol mixed is white; neither does a ſolution ſalis tartari become ink with vitriol. Moreover an infuſion of galls with vitriol precipitates, unleſs gum be added. He adds, " ſi ſalem vitriolicum, vel quid Martialis,
" aut Venerei, aquæ minerales continent, a Gallarum infuſo vel decocto, ni-
" gro, violaceo, purpureo, vel ſubpurpuraſcente colore inficiuntur, prout
" plus vel minus ſalis metallici continent." But Galls turn a ſolution of blue vitriol white like milk. Yet he makes his ink with no other vitriol but the vitriolum Hungaricum, which every where, as well as in his vol. i. p. 124, is blue vitriol. What ſort of ink will this produce?

We have very many receipts for making ink. There is a treatiſe by *Petrus Maria Caneparius*, de Atramentis cujuſcunque generis, (opus ſane novum, hactenus a nemine promulgatum, in ſex deſcriptiones digeſtum:) Venetiis 1619 & 1629. Londini 1660. & Roterodami 1718. in 4to. It is obſerved that the modern writings do not keep their colour ſo well as the antient. What I made by Mr. *Ray*'s directions ſeems to anſwer the character he gives of it. " Ex Gallis cum chalcantho, gummi & vino atramentum ſcriptorium opti-
" mum paratur hoc modo. ℞ Gallarum ʒiv. chalcanthi ʒij. gummi Arabici
" ʒj. Gallas craſſiuſcule contritas in vini Gallici rubri (quod claretum noſtrates
" vocant) ſextariis duobus (a quart) infundas per novem dies, vas prope
" ignem collocando, & liquorem quotidie rudicula agitando aut commovendo.
" Deinde chalcanthum & gummi immittas, & cum unum amplius diem ſte-
" terit, atramentum uſui idoneum erit. Literæ hoc atramento exaratæ in
" charta, diuturnitate temporis colorem non mutabunt." *R. H.* 1390. However I muſt own, though it continues ſtill black enough, it has loſt a little of its bluiſhneſs in two years time, after writing. N. B. Ink ſhould be expoſed to the air as little as poſſible.

KERMES.

SECT. I.

Kermes, Chermes, Grana Kermes, Coccus Caphica. *off.* Kermes-Berries. Theſe are about the bigneſs of peas, of a browniſh red colour, bitteriſh taſte, and not unpleaſant ſmell, found on the

Ilex aculeata cocciglandifera. *B. P.* 425. *T.* 583. Ilex coccifera. *J. B.* 1, 2, 106. *Ger.* 1342. *R. H.* 1392. Ilex minor coccigera. *Dod.* 827. Ilex aquifolia, ſive coccigera. *Park.* 1394. Coccus infectoria. *Lob.* 581. The Scarlet Oak.

On

On the trunk, branches, and leaves of this ſhrub in the month of March appear little points, half a line diameter, which in June arrive at their full magnitude, being about three lines diameter. They always yield a red liquor when bruiſed, and can be eaſily ſeparated from the plant, without the leaſt lacerating, or diſcovering any puncture or tuberoſity in the part they adhered to, though viewed with a microſcope. Vid. Mr. *Niſſole*, *Mem. Acad.* 1714. It was the general opinion that it was an excreſcence cauſed by a certain inſect, and a nidus for its eggs. But, according to Mr. Reaumur, it is not a neſt, but a real inſect, of that kind which he calls Gall-inſects. See his *Memoirs pour ſervir a l'Hiſtoire des Inſects*. Tom. iv. Mem. 1. or *Geoff.* ii. 783.

The Kermes is very plentiful on this ſhrub in the South of France: that of Languedoc paſſes for the beſt. Great quantities of the ſyrup of its pulp are made at Nantes and Montpelier, whence it is ſent through all Europe in little barrels. Vid. *Savary*.—" Ilex coccigera . . . non ubique coccum gerit. " Nam iis ſolum regionibus quæ Mediterraneo mari vicinæ ſunt, & magno " ſolis ardore torrentur, naſci animadvertebam: ſed neque iſtic perpetuo fert: " cum enim frutex adeo adolevit, ut glandem alere incipiat, coccum non gig- " nit; ideoque ſolent incolæ quadriennes aut adultiores frutices urere, ut pro- " ximo anno novelli aſſurgant." *Cluſ. H.* p. 24. There is little of it uſed in dying ſince the uſe of cochineal was known, which gives a much brighter colour, though not ſo laſting.

It is called κοκκος βαφικη, i. e. Coccum tincale, by *Dioſcorides*, l. 4. c. 48. p. 260. Kermes by the Arabians, which name is now moſt common; and hence color kermeſinus, and crimſon.

SECT. II.

It is probably attenuant and ſubaſtringent, at leaſt antacid; called cordial; and commended in the palpitatio cordis, ſyncope, lowneſs of the ſpirits, diſeaſes of the head, hard and difficult labour, as a remedy to prevent abortion, &c. But I not only doubt of theſe virtues, but ſuſpect it contains ſome noxious or malignant quality.

" Cardiaca ſunt grana, calefaciunt, & ſiccant, aſtringunt, vapores tetros " diſcutiunt, ſpiritus vitales reficiunt, parturientibus ſubveniunt, vulneratis " nervis medentur, morbillos erumpere faciunt. *Præp.* 1. Confectio Alker- " mes. 2. Extractum ſeu eſſentia. N. B. Scarlatus pannus, granis hiſce " tinctus, admodum celebris eſt, adhibeturque non modo ad morbillos proli- " ciendos (patientes in eum involvendo) ſed & ad cor roborandum (epithemata " eo ſuſcepta cordis regioni imponendo) ut & ad bubones Venereos curandos " (pannum iis imponendo). Quin & filo ſerico, hujus coloris, ad arcendum " eryſipelas, locum affectum circumligare, vulgo uſitatiſſimum eſt." *Schrod.* 563.

It is pretty bitter, ſomewhat diſagreeable, and ſcarcely ſubaſtringent to the taſte; and of a weak aromatic ſmell. " Odoris debilis non ingrati, ſaporis " ſubacris, amaricantis, & in receſſu paullulum quoque adſtringentis." *Cartheuſer*, ii. p. 536. " Saporis, ſubacris, ſubamaricantis, odoris non ingrati." *Herm. Cynoſ.* p. 297. & *Geoff.* ii. 782. " Saporis ſubacris, amaricantis, odoris

" grati." *Nucl. Belg.* 154. " Quomodo autem cor corroboret & exhilaret, " cum præter adſtrictionem & amaritudinem nulla qualitas manifeſta in ea " percipiatur, nos fugit. Odorem quem ſenſerunt fragrantiſſimum in vermi- " culis & granis ipſis Lacuna & Quinqueranus inter præparandum, mirum cur " alii aut non deprehenderint, aut non meminerint." *R. H.* 1393.—2. I pour- ed on gran. Kermes ʒj. aquæ bullientis ℥vj. When it had ſtood a day ma- cerating it was of a pellucid deep crimſon colour, bitter ſubaſtringent and nauſeous taſte, and fetidly muſty ſmell. Oleum tartari gave it the colour of claret, but not an urinous ſcent: ſpirit of vitriol brought it to the colour tinct. croci, and precipitated a little of a ſaffron mucus: ſolutio vitrioli made it opake and black, precipitating a good deal of greyiſh black ſediment, leaving it green and tranſparent above: ſpirit of vitriol turned this mixture again pellu- cid and red, but paler than the infuſion. Neither ſyrup of violets, nor ſolu- tion of turnſole, made any obſervable change of colour. The reſiduum filtered and dried weighed gr. liij. ſo that water extracted thus no more than gr. vij. from gr. Kermes ʒj. The remaining gr. liij. infuſed in alcohol vini ʒxij. for ſome months, gave it a ſaffron tincture; and it loſt of its weight gr. iv. only; there remaining of the Kermes, after all well dried, ℈ij. gr. ix. Hence it appears to be ſubaſtringent. — 3. " Analyſi chymica ex granorum Kermes " recentium ℔j. prodierunt non parum phlegmatis, primo odoris & ſaporis " expertis, deinde empyreumatici (yielding ſome phlegm ſmelling like the " berries, and ſome urinous ſpirit which does not alter the tinct. heliotropii, " but changes the tincture of violets green) ſalis volatilis concreti ʒvj. (of " concrete volatile ſalt ℥ß. and about ʒj. or ij. more mixed with the oil); " olei citrini aliquantulum; ac tandem olei ſpiſſioris, empyreumatici, portio " non mediocris; quæ nullas acidi ſalis notas præbuerunt. Ex maſſa nigra " ſuperſtita nihil ſalis fixi lixivio fuit extractum, ita ut ex animali proſapia " coccum illud oriundum videatur." *Geoff. M. M.* ii. 788. A very lame analyſis, which cannot much be depended on.———N. B. Mr. *Geoffroy (Mem. Acad.* 1714.) ſays that much thick fetid oil was extracted from the maſſa nigra, but mentions not any fixed ſalt. — 4. Theſe grains are ſaid to be very noxious to pigeons. " Garidellus, in Hiſt. Plant. Aquiſextienſium, " obſervat columbas grana Kermes avide expetere, ſuiſque aggerere pullis; at vero eſcam illam eiſdem eſſe infeſtam, ita ut Juniores intereant, vetuſtiores " vero alvi profluvio rubro afficiantur. Ex qua quidem obſervatione non " prorſus innoxium eſſe hoc granum concludere poſſemus, niſi contrarium " frequentiſſimo illius uſu, ſatis ſuperque probaretur. Columbis autem noxi- " um eſſe poteſt, quod hominibus quibuſdam in circumſtantiis ſalutare com- " peritur." *Geoff.* ii. 790. But was a noxious ſubſtance never long and much uſed as a medicine? " Rondeletius archidiaconum Valentiæ in dyſenteriam " ob nimium & frequentem uſum confectionis Alkermes incidiſſe obſervavit." *S. Paulli Q. B.* p. 69. This is attributed to the lapis lazuli; though there is but ʒij. of it (uſti, loti, & præparati) in between confectionis ℔iij. & iv. — 5. It dies a deep and laſting red. *Vid.* Rubia tinctorum. And—6. Is com- mended in many diſeaſes. The antients uſed it only as aſtringent externally. " Vim habet ſtypticam vulneribus, nerviſque ſauciatis tritum ex aceto con- " venienter imponitur." *Dioſcorid.* l. c. We owe its reputation as a cordial to the Arabians. " Electarium ex granis tinctoriis, ad cordis palpitationem, " ſyncopem, mentis alienationem ſeu deſipientiam, mœrorem ſine cauſa ma-

" nifeſta. Facultates enim noſtrum corpus diſpenſantes mirifice roborat." *Meſue Grab.* l. 1. fol. 89. or rather to more modern authors. For this electuary can have little from the Kermes. Vide ¶ infra. " Arabes primi ejus " virtutis cardiaci mentionem fecerunt. Meſues illud ad cordis palpitationem, " ſyncopem, mentis alienationem & melancholiam commendavit." *Geoff.* ii. 788. But it is the electuary Meſue ſo commends; which later authors applying to the Kermes, they have not a little altered the compoſition. " Nunc " vero in difficili partu ad vires ſuſtinendas, ad vomitum ſedandum, & ven- " triculum roborandum, ejus pulvis plurimum celebratur. Mulieribus ad " abortum præcavendum feliciter exhiberi ſolet. Quin etiam prægnantes ab- " ortum metuentes, ſericum cocco tinctum ſæpe deglutiunt." *Geoff.* l. c. Thus the dyed ſilk ſeems to be found as ſucceſsful in preventing abortion as the grains, and the grains as effectually to facilitate delivery as to prevent abortion: and if ſo, I may infer neither has any effect in the one nor in the other. Mr. *Geoffroy* thinks otherwiſe. " Plurimas novi mulieres, quæ nun- " quam ad ultimum graviditatis terminum pervenerant ſine abortu, & tan- " dem ſequentium pilularum uſu per novem menſes abſque ulla noxa fructum " ſuum geſtaverunt, & vivacem prolem feliciter enixæ ſunt. ℞. Granorum " Kermes recentium, confect. de hyacintho ana ʒj. ovorum germinum ex- " ſiccat. & pulveratorum ℈j. ſyrupi Kermeſin. q. ſ. M. F. pilulæ ix. pro tri- " bus doſibus." *M. M.* ii. 788. See there his directions how to uſe them. They can ſcarce need the ſyrup, yet will be large pills. Now is it not probable, that if Kermes in a large doſe be not hurtful, at leaſt as it is uſed, it has little effect any way? " Quidam cardiacam virtutem cocco baphico de- " negant, ſolam adſtrictionem ei concedentes. Verum ſi ad ejus analyſim at- " tendere velint, intelligent ſane tinctorium granum ſalibus volatilibus turgere, " ac proinde maſſæ ſanguineæ ſpiritibus deſtitutæ actuoſas partes poſſe ſup- " peditare." *Id.* ii. 790. But if he had attended to what he obſerves on the analyſis extracti lactucæ, he would not have ſaid ſo. Beſides, are volatile ſalts proper to prevent abortion? Does not every animal ſubſtance abound with them? But Kermes is alſo aſtringent. His analyſis makes the whole animal: and I know no animal ſubſtance aſtringent: beſides, it is too weak an aſtringent to do ſervice in this caſe. But if its virtues depend on its aſtriction, there are hundreds of cheaper ſimples that may be juſtly preferred to it. " Partim ab- " ſtergendo, reſolvendo, & diſcutiendo, partim ſtimulando atque ſubadſtrin- " gendo in corpore operantur, ſuumque ideo locum quem hactenus inter ner- " vina, cephalica, cardiaca, ſtomachalia, diuretica, & aphrodiſiaca occupa- " runt egregie omnino tuentur, &c." *Carth.* ii. p. 542. *Credat qui vult.*

SECT. III.

Kermes is given in powder to ʒß; the ſyrup to ℥ß; and confectio to ʒij. " Pulvis exhibetur a ℈ß. ad ʒß; ſyrupus vero ab ℥ß. ad ℥j." *Geoff.* ii. 788.

¶ The confectio Alkermes *Meſuæ* is thus prepared: ℞. Serici ſucco Kermes recenter tincti ℔j. ſucci pomorum dulcium & aquæ roſarum ana ℔iß 24 horis macerandam, deinde pauliſper his incoquendam donec liquores iſti rubeant: quos expreſſo & abjecto ſerico, coque cum ſacchari opt. ℔iß. ad mellis conſiſtentiam:

siſtentiam: ab igne depoſitis, ſed adhuc calentibus, miſce ambræ crudæ minutim conciſæ ʒiv. qua liquata injice pulverem ſequentem, ligni aloes, cinnamomi āā ʒvj. lapidis lazuli loti, & præparati, margaritarum āā ʒij, auri foliorum ʒj, moſchi ϑj. Datur ab aureo uno, ad aur. iiß." Thus *Meſue*, l. c. ſo that here is little Kermes indeed. The conf. Alkermes *Monſpelienſium* adds ſucci gran. Kermes ℔j. And on this wonderful confection, Catelanus, Strobelbergerus, Bertaldus, &c. wrote treatiſes in the laſt century; though inferior perhaps to that by Meſue. Vid. *Pharm. Aug. Zwelf.* p. 253, 254. *Our* confection might do without the ſantalum citrinum. The *London* confection conſiſts of ſucci granorum Kermes colati, p. ℔vj. aquæ roſarum M ℥vj. olei cinnamomi ϑß. ſacchari puriſſimi ℔j. If ol. cinnamomi ʒj. was uſed, it might perhaps be called cordial with ſome propriety.——

LECTURE LXV.

JUJUBA.

SECT. I.

Jujubæ, Zizypha, *offic.* Jujubæ majores, oblongæ. *B. P.* 446. Jujube Arabum, ſive Ziziphus Dodonæi. *Ger.* 1501. Ziziphus. *Dod.* 807. *T.* 627. Zizypha ſativa & ſylveſtris. *J. B.* 1, 2, 40. Zizyphus, ſive Jujuba major. *Park.* 250. *R. H.* 1533. Rhamnus floribus digynis; aculeis geminatis, rectis; foliis ovato-oblongis. *H. Cliff.* 69. Jujuba ſylveſtris. *B. P.* 446. The Jujube-tree.

It grows ſpontaneouſly in Italy; where, as in Spain, South-France, &c. it is alſo cultivated; and its fruit by culture much improved. " Florent Maio " & Junio: fructus leguntur Autumno, vel poſt, una cum ſurculis, & in " manipulis colligati, poſt aliquot dierum inſolationem, laquearibus ſuſpen- " duntur: poſtremo decerpti, in capſulas reponuntur ad medicos uſus. Sunt " qui decerpta Zizypha, & cratibus tegetibuſque inſtrata tamdiu inſolant, " quouſque rugoſa ibidem fiant." *R. H.* 1534.

It is a ſtone fruit, like an olive, of a dark red colour, and a very ſweet taſte. " But now quite out of uſe, and hardly to be met with in the ſhops." *Miller's Bot.* 247.

" Arbor Ziziphus Columellæ, l. 9. c. 4. dicitur fructus vero recentioribus " Græcis, ut Actuario & Simeoni Sethi, ζιζυφα ζιντζιφα, & ζιτζυφα, Latinis " Zizypha: officinis Jujube. *B. P.* " Fructus vix durat ultra ſextum men- " ſem." *Hoffman.* 266. " Zizyphus vox peregrina eſſe videtur." *R. H.* " Jujuba vox eſt Arabica. *Hoffman.* l. c.

SECT. II.

They are antacrid, and ſomewhat incraſſating; called pectoral; and commended in coughs, hoarſeneſs, pleuriſy, heat of urine, ſtrangury, &c. They are uſed in decoctions like dates.

" Jujubæ moderate calfaciunt & humectant. Uſus præcipui in pulmonum " aſperitate, tuſſi, pleuritide, urina acri, ferveſcentia ſanguinis, eroſione renum & veſicæ. *Præpar.* Syrupus de Jujubis." *Schrod.* 609.

1. They are very ſweet, ſubviſcid, and luſcious. " Pulpa eſt melleæ dulce- " dinis." *J. B.* " Saporis mellei & vinoſi." *Herm. Cynoſ.* 395. " Saporis " dulcis & vinoſi." *Geoff.* ii. 307. Venetiis recentes abunde venales vidimus, " quamvis palato noſtro non multum arrideant." *R. H.* 1534. — 2. Analyſi chymica, ex ℔iv. ʒiij. pulpæ Jujubarum, a nucleis ſeparatæ & in mortario contuſæ, ita ut in maſſam tenacem admodum, & viſcidam, redigeretur; prodierunt humorum ℔ij. ʒiij. ʒiij; olei butyroſi ʒiij; carbonis ʒxviij, unde cinerum ʒj. ʒvj, ac inde ſalis fixi ʒiv. gr. liv. mere alcali, (ergo terræ ʒix. gr. xviij.) & jactura fuit ʒxiij. ſecundum *Geoff.* ii. 309. But here ʒij. are wanting. The mortar diſcovered more of the nature of this pulp than can be learned from all the analyſis.

LUPULUS.

SECT. I.

Lupulus. *off.* Lupulus mas. *B. P.* 298. *T.* 535. *J. B.* ii. 151. *R. H.* 156. *Syn.* 137. Lupulus. *Dod.* 409. Lupulus Sativus. *Park.* 176. Lupulus Salictarius, ſive Lupulus. *Lob.* 347. Lupulus Salictarius, ſativus, *Ger.* 884. Convolvulus, perennis, heteroclitus; floribus herbaceis, capſulis foliaceis, ſtrobili inſtar. *H. Ox.* ii. 37. Humulus. *H. Cliff.* 458. Hops.

They grow wild in hedges, &c. in England; and are alſo carefully cultivated in particular gardens or hop-yards. " Non ante Julium floret. Hinc " rythmus ille Anglicus: *Till St. James's day be come and gone, You may have* " *hops, or you may may have none.* Fructus initio Septembris maturi ſunt." *R. Syn.* The fruit (called ſometimes flores) young ſhoots, and leaves, are uſed.

" *Officin.* Flores, & Juli (turiones, aſparagi) Martio menſe prorumpentes." *Schrod.* 618. " Uſu folia, flores, & turiones." *Dale* 67. " Folia & flores." *Pharm. Lond. vet.* " Folia." *Pharm. Edinb.* though the leaves are leaſt uſed.

" Lupulum a Plinio, l. 1. c. 15. (p. 553.) Lupulum Salictarium nomina- " tum volunt: qui Meſue 2. purg. 24. volubilis foliis aſperis dicitur. Hodie " in Græcia βρυονια nominatur." *B. P.* See *Meſue Simpl.* l. 2.—" Lupulus, " ut & bryonia nigra, convolvulus niger, & periclymenum, ſcandendo mo- " tum ſolis obſervant, hoc eſt, a dextra ad ſiniſtram, ſeu ab oriente per meri- " diem, verſus occidentem flectuntur; nunquam in contrariam partem. Alii " a ſiniſtra verſus dextram flectuntur, ut phaſeolus, cuſcuta, convolvulus " major & minor: alii nunc in hanc, nunc illam partem, ut dulcamara." *R. H.* 157.

SECT. II.

Hops are attenuant, antiſeptic, diuretic and laxative; called ſtomachic; and commended internally in phlegmatic obſtructions of the viſcera, ſcurvy,

jaundice, ague, &c. and outwardly as anodyne and diſcutient. The young ſhoots and leaves are milder, and reckoned alſo diuretic, laxative, antiſcorbutic, and ſweetners of the blood.

" Flores calfaciunt & ſiccant 2. Amari ſaporis anodynique ſunt, diſcutiunt. " Uſus præcipui in obſtructione lienis & hepatis, & inde in ictero, in hypo- " chondriacis affectibus, &c. Ciet menſes & urinam. Extrinſecus ſedat do- " lores, auxiliatur contuſionibus, luxationibus, tumoribus. Juli mundificant " ſanguinem, adeoque a ſcabie præſervant (in acetariis aſſumpti) N. nimius " ejus uſus gravat caput. *Præpar.* 1. Aqua e floribus. 2. Syrupus, e ſucco " turionum, p. ii. & ſucco fumariæ, p. i." *Schrod.* 618.

1. It is very bitter, aromatic, and reſinous, containing a ſort of turpentine. The young ſhoots are bitteriſh, and not unpleaſant when boiled. They are rather alcaline or ſaponaceous than acid. — 2. " Analyſi chymica ex lupuli " foliorum & ſummitatum cum fructibus ℔v. prodierunt humorum ℔iv. ℥j. " gr. liii; olei ſpiſſi ℥iij. ʒv; ſalis vol. urinoſi ʒj. gr. xxxiv; carbonis ℥vj. ʒij. " unde cinerum ℥ij. ʒij. gr. xxx. ac inde ſalis fixi mere alcali ʒiv. gr. lxvj. " (ergo terræ ℥j. ʒvß.) & jactura fuit ℥iv." ſecundum *Geoff.* iii. 758. " The " hop is bitter, deterſive, and does not redden the blue paper: by a chymical " analyſis, this plant yields little acid, a good deal of oil and volatile ſalt; " which ſhews that it contains ſome ſal ammoniac, mixed with ſulphur and " earth. The young ſhoots and tops are uſed to purify the blood in the ſcur- " vy, and all the diſeaſes of the ſkin." *T. Hiſt.* p. 235. — 3. Hops preſerve malt liquors from ſpoiling, or turning ſour, and at the ſame time make them more ſtrong, intoxicating, and ready to cauſe head-achs, and to affect the eyes; as do alſo other bitters and aromatics: but they are more ſtomachic and diuretic: hence of great uſe in cold, moiſt, countries, conſtitutions, and diſeaſes. Hop'd beer in time loſes its bitterneſs, and becomes tart: but if the acid be abſorbed by chalk, or ſuch-like ſubſtances, it becomes as bitter as at firſt, but ſoon grows vapid: which explains, in ſome manner, the nature of bitters, and their effect on fermentation. — 4. They have the virtues of aromatic bitters. " ℞. Salis nigri, lupulorum recentium āā M. ii. uvarum Corinth. cœrul. libræ " ¼ probe contuſa, mixta, & in maſſam fragilem redacta, carpis applicentur " pro epithemate ad Febrem quotidianam fugandam." *D. Boyle de Util. Phil. Nat. R. H.* 157. A decoction radicum lupuli is uſed in Spain as a ſudorific, ad curandam alopeciam a lue venerea natam. Vid. *Cluſ. Hiſt.* 126.

It is controverted whether hops are hurtful in the ſtone and gravel: ſome aſſerting that hop'd malt liquors irritate nephritic paroxyſms, which unhop'd ale rather mitigates; and that ſince hops came to be commonly uſed in beer in England, the ſtone has been much more common than it was before: while others hold that hops, being diuretic, muſt rather prevent than breed the ſtone; ale being no otherwiſe uſeful in this diſeaſe, than as, by its lubricity, it eaſes ſome of the ſymptoms; that wine-drinkers are more obnoxious to the gravel and ſtone than beer-drinkers; and that theſe diſtempers are not now more common than formerly. " Quamvis Lupulus frequentioris hodie ſit uſus in " urbe Londino, quam unquam antehac fuerit, pauciores tamen inibi nunc " dierum, quam ſuperiore ſæculo, calculo laborant, ut ex acuratis D. Graunt " obſervationibus patet." *R. H.* 157. By the *London* bills of mortality, an. 1744. out of 20606 only 29 died of the gravel, ſtone, or ſtrangury; 73 between

tween 90 and 100 years old; and 46 of the gout. An. 1745, out of 21296, only 36 died of the gravel, &c; 55 of the gout; and aged between 90 and 100, 77. From which and other obſervations it ſeems, that the ſtone and gravel are not very common, or not very fatal, in that great city, notwithſtanding the great uſe of hops there; which cannot, one would think, be more hurtful in that diſeaſe than other aromatic bitters. "Putamus liquores illos "fermentatos ſpirituoſos generationem calculi promovere, lympham, ſeu ſan-"guinis ſerum inſpiſſando, & ad lapideam uſque duritiem coagulando. Quod "experientia unicuique patebit ſi ſanguinis ſerum in ſpiritum vini, aut cere-"viſiæ infundatur, quod ſtatim concreſcit, ſicut albumen ovi ignis calore "coctum, ac tandem prorſus indureſcit." *Geoff.* iii. 759. But however true it may be that ſpirituous liquors promote the generation of the calculus, he badly accounts for it; as, though highly rectified ſpirits coagulate the blood's ſerum, wines do not ſo; and if they did, the bad conſequences would be more ſudden than the generation of a calculus. See what he ſays of ſalt and ſalted meat, *M. M.* i. p. 104.

LECTURE LXVI.

MALA CITREA.

SECT. I.

1. Aurantium, Aurantia malus. *offic.* Malus Arantia major. *B. P.* 436. Arantia malus. *J. B.* i. 97. Malus Aurantia. *Dod.* 792. Malus Arantia. *Ger.* 1463. Malus Arantia vulgaris. *Park.* 1508. Malus Aurantia. *R. H.* 1658. Aurantium acri medulla, vulgare. *Ferrar. Heſp.* 377. *T.* 620. Citrus petiolis alatis. *H. Cliff.* 379. The Orange-tree.

2. Citreum, Malus Citrea, Citrus. *offic.* Malus Medica, *B. P.* 435. *Ger.* 1462. *Dod.* 792. Citrus. *Cæſ.* 139. Citria Malus. *J. B.* i. 94. Malus Medica, vel Citria. *Park.* 1505. Mala Citria, ſive Medica. *R. H.* 1654. Citreum vulgare. *T.* 620. Malum Citreum, vulgare. *Ferr. Heſp.* 61. Citrus Petiolis linearibus. *H. Cliff.* 379. The Citron-tree.

3. Limonium, Malus Limonia, Limon. *offic.* Malus Limonia, acida, *B. P.* 436. Malus, Limonia. *Dod.* 791. *Ger.* i. 1462. *R. H.* 1656. Malus Limonia acida vulgaris. *Park.* 1507. Limonia Malus. *J. B.* i. 96. Limon. vulgaris. *Ferr. Heſp.* 193. *T.* 621. Varietas eſt prioris, ſecundum *H. Cliff.* 379. The Lemon-tree.

They are natives of both the Indies; alſo of Aſſyria, Media, and Perſia; whence they were firſt brought to Italy; and thence carried into Spain, where now there are woods of them. *J. B.* thinks that the orange was the Malum Medicum of the ancients, Theophraſtus, &c. though moſt authors are of opinion that it was rather the critron. "Malus Citria, Græcis μηλεα "μηδικη, malus medica & Aſſyria dicitur, utroque nomine a regionibus ducto, "ut habet Theoph. 4. hiſt. 4. Etenim Citrus apud Medos & Perſas imprimis "frequens, dein Paladii diligentia in Italiam tranſlata fuit: poſtea in Hiſpania

"in

" in uſum devenit, ut nemora & campos occuparit: fructus μηλα μηδικα ήπε-
" ρεικα, addit Dioſcorides, l. 1. c. 166. ήχεδρομηλα; Latinis Citria, Citrea,
" & Citromela." *B. P.* 435.

" Media fert triſtes ſuccos, tardumque ſaporem
" Felicis mali; quo non præſentius ullum,
" (Pocula ſi quando ſævæ infecere novercæ,
" Miſcueruntque herbas, & non innoxia verba)
" Auxilium venit, ac membris agit atra venena.
" Ipſa ingens arbos, faciemque ſimillima lauro;
" Et, ſi non alium late jactaret odorem,
" Laurus erat: folia haud ullis labentia ventis:
" Flos apprima tenax: animas & olentia Medi
" Ora fovent illo, & ſenibus medicantur anhelis."

Virg. Georg. I. 2. v. 126.

" Aurantia forte a corticis colore, qui colore auri relucet, ut aurea mala
" vere nominari poſſunt: ſive ab Arantia oppido dicta, veteribus ignota, in-
" ſitione ad nos devenerunt." *B. P.* 436. " Aurantium ab auri potius colore
" dictum puto quam ab orange, Galliæ oppido; vel ab Arantia Achaiæ urbe.
" Aurantiæ enim nomen priſcis incognitum, non ante in uſum venit, quam
" Arantium oppidum deletum eſt." *R. H.* 1658. " Citri vox equivoca eſt,
" & pro duabus arboribus accipitur, altera in frugifera, e cujus ligno menſæ
" olim fiebant; altera pomifera, quæ aliter malus medica, & Aſſyria dice-
" batur ut Plinius diſertis verbis docet." *R. H.* 1655. " Limoniæ nomen
" haud temere apud ullum probatum, vel Græcum vel Latinum, autorem in-
" venias, videturque poſterioris ſeculi eſſe inventum." *R. H.* 1656.

Culture has produced a vaſt variety of each of theſe; among which the Malus Aurantia Hermaphroditica, fructu medio Citrio, medioque Arantio, odoratiſſimo. *H. L.* 407. may be reckoned " inter hortenſia miracula, multi-
" vario cultu, & inſitionis artificio producta," as the author there obſerves.

The fruit of the Orange, including the ſkin, pulp, ſeeds, and flowers; the cortex Citri conditus; and Lemon peel and juice; are uſed: but the flowers are ſeldom preſcribed: and for the ſuccus Citri, the juice of Lemons is taken. Many treatiſes have been written on theſe trees. Vid. *Seguier B. B.*

SECT. II.

The juice or pulp of theſe is an acid antiſeptic; called alexipharmic; and commended in ardent and putrid fevers, peſtilence, ſcurvy, worms, and where-ever thirſt, putrefaction, or bilious acrimony offend. The orange is mildeſt.

The ſkins are ſtimulating, aromatic, and bitter . . . . attenuant, diaphoretic, and carminative; called cordial and ſtomachic; and commended in lowneſs of the ſpirits, want of appetite, indigeſtion, nauſeæ, flatulent colics, &c. The ſeeds are more oily, but not ſo aromatic.

" Citrinum malum (cum cortice ac carne) alexipharmacum putatur cujuſ-
" libet veneni, reſiſtit putredini morbiſque malignis, lumbricos fugat, diapho-
" reticum eſt. Cortex calfacit 1. ſiccat 2. (*aliis* calfacit & ſiccat 3.) Caro
" refrigerat

" refrigerat & humectat, & hinc ſuccus expreſſus. Semen calfacit & ſiccat 2. " attenuat, digerit, abſtergit, lumbricos fugat. Præparata varia." *Schrod.* 568.

" Aurantia acida & vinoſa præferuntur reliquis, eaſdemque virtutes habere " putantur, quas Citria mala, imbecillius tamen. Cortices calidiores ſunt, " uſuſque vulgaris, in torminibus ventris coliciſque (a flatu ſubortis) inque " dyſuria, corrigenda. Quinimo & febrifugi comperti ſunt ſubſequente ſu- " dore. Doſis a ℈j. ad ʒj. *Præpar.* 1. Aqua, ex floribus. Dicitur peculia- " riore nomine nampha, laufam, vel angelica. 2. Aqua, e corticibus. 3. Suc- " cus expreſſus. 4. Syrupus ex ſucco acido, &c." *Schrod.* 541.

" Limonia mala Citri virtutes æmulantur, niſi quod ut magis acidiuſcula " ſint, ita & magis refrigerantia & ſiccantia. Uſus præcip. in febribus, aliiſ- " que morbis calidis, in calculo, & ſimilibus. *Præpar.* 1. Succus expreſſus. " 2. Syrupus de ſucco. 3. Aqua ex floribus quæ raro extat." *Schrod.* 616.

1. The ſkins of theſe fruits contain (in proper cells) a moſt fragrant aromatic eſſential oil, of a pleaſing comforting ſcent; they are alſo very agreeably bitter; as the pulp or juice is remarkably acid. Hence they claim the virtues of acids, bitters, and aromatics. The leaves alſo are aromatic (though not ſo agreeably) and bitter; but the flowers above all are fragrant and ſweet ſmelled, and the water diſtilled from them not only highly valued as a perfume, but alſo as a cordial. " Flores Mali Aurantiæ in præcipuo honore " ſunt odoris gratia, & aqua fragrantiſſime odoris ex iis paratur, quam na- " pham vocant; non tantum ad delicias, ſed contra peſtem & morbos conta- " gioſos utilem, & cordi amicam, quæ & ſudores movet. Hiſpani parturien- " tibus, in difficili partu, propinant, cum pauxillo aquæ pulegii." *R. H.* 1659. See ſome obſervations on the diſtilling the eſſential oil of theſe fruits, in *Zwelf. Pharm. reg.* p. 664. The bitterneſs of the peels is eaſily extracted by water, wine, or ſpirits. — 2. Citron peel is much commended for weak and windy ſtomachs, melancholy vapours, palpitation of the heart, obſtructions of the viſcera, &c. " Ab experientia Herm. Grube de Malo Citreo, p. 36, 37." *R. H.* 1655. And the alexipharmic virtue of all the fruit is celebrated much. " Athenæus experimento jamdudum innotuit, ſumptum Citrium ante quod- " vis alimentum, ſiccum pariter & humidum omnibus venenis reſiſtere, quem- " admodum ſe ſatis noviſſe ſcribit, a ſuo cive id edoctum, cui Ægypti man- " data fuerat adminiſtratio. In maleficio deprehenſos quoſdam ille ad ſerpen- " tum morſus damnaverat, quos opportebat ejuſmodi beſtiis objici. Productis " illis, & ad theatrum euntibus deſtinatum latronum ſupplicio, in via forte " caupona quædam miſericordia commota, quod in manibus tum habebat, " Malum Citrium dedit. Acceptum vero illi comederunt: & paulo poſt in- " gentibus ac ferociſſimis anguibus oblati, commorſique ab aſpidibus, nihil " læſi ſunt: qui tandem cum illorum cuſtodem militem interrogaſſet, num " quid bibiſſent, aut ediſſent, ut id comperit quod acciderat, nimirum abſque " dolo Citrium illis traditum fuiſſe, poſtridie alteri rurſum dari juſſit, alteri " minime: percuſſus hic confeſtim periit, illæſo altero qui Citrium comederat. " Indeque multis & expertis cognitum eſt Citrium adverſari venenis omnibus. " Quod ſi quis Citrium integrum, & quale natura eſt, cum ſemine, in Attico " melle coquat, donec liquatum tabeſcat, & ejus liquoris matutino tempore " hauſtulum ſumat, tutus erit a venenatis omnibus medicamentis." *J. B.* i. 103. *R. H.* 1656. A memorable ſtory *ſi modo vera!* But, though in itſelf incredible,

incredible, *Redi* (*Obſ. de viperis*, p. 190.) is at the pains to prove it fabulous. The ſame virtues belong to all the three, they differing principally in the degree of acidity. Some make lemon-juice lithontriptic. "Succo Limonum "ſcribuntur literæ occultæ, quæ igne admotæ manifeſtantur." *R. H.* 1659. Mr. *Geoffroy* gives three analyſes aurantiorum, *viz.* Petalorum exſiccatorum, Corticum recentium, & Succi. iii. 151. "Analyſis chymica aurantiorum pe-"talorum exſiccatorum ℔v. præbuerunt humorum ℔j ʒxivß. gr. xxii; ſalis "vol. urinoſi gr. xxvj; olei ʒviij. ʒj. gr. xxviij; carbonis ℔j. ʒx. ʒvij. gr. xl, "unde cinerum ʒv. ʒv. gr. xl, & inde ſalis fixi mere alcali ʒiv. ʒiij. gr. xij. "(ergo terræ ʒx. gr. xxviij.) ac jactura fuit ʒxiv. ʒij. gr. xxx. (ſum ℔v. gr. ij.) "*M. M.* iii. 151. N. B. Sal fixum & jacturam."... "Ex Corticum Auran-"tiorum acidorum ℔v. prodierunt humorum ℔iij. ʒxv. ʒiijß; olei ʒij. ʒvij. "gr. lxi; carbonis ʒvij, unde cinerum ʒj. ʒiij. gr. xij, ac inde ſalis fixi mere "alcali ʒiij. gr. xviij. (ergo terræ ʒvij. gr. lxvi.) & jactura fuit ʒvij. ʒv. "gr. xlvij." (the ſum of which is ℔v. ʒix: But ol. eſſent. ʒix. it ſeems, were included in the firſt portio humoris, to which I have added it.) *Ibid.* How different theſe two analyſes! He gives the Analyſis Corticis exterioris Citri. iii. 332. & Succi Citri. p. 333.

SECT. III.

The doſe need not be determined. We have a ſyrupus e cortice Aurantiorum, ſyrupus e ſucco Aurantiorum, ſyrupus e ſucco Limonum, & conſerva corticis exterioris Aurantiorum; conditus cortex of all three kinds; & oleum ſtillat. corticis limonum. The juice of Oranges is one of the ſucci antiſcorbutici. And they are a part of many ſhop compoſitions. Thus,

Cortex Aurantiorum is in the aquæ abſinthii, bryoniæ, & raphani compoſitæ; tinctura ad ſtomachicos; elixir ſtomachicum, & electuarium cardiacum. The cortex Limonum is in the aqua mirabilis, & raphani compoſita; & electuarium cardiacum: the ſuccus Limonum (vel Aurantiorum) in the gelatina C. C. and the oleum ſtillatitium e cort. Limonum is in the ſpiritus lavendulæ compoſitus, the ſpiritus ſalinus aromaticus, and elixir vitrioli.

MALA COTONEA.

SECT. I.

Malus Cotonea, vel Cydonia. *off.* Mala cotonea majora. *B. P.* 434. Malus Cotonea. *Dod.* 795. *Ger.* 1452. Cotonea malus. *J. B.* i. 27. Malus Cotonea vulgaris. *Park.* 1504. Malus Cydonia ſeu Cotonea. *R. H.* 1452. Cydonia, fructu oblongo læviori. *T.* 632. Pyrus foliis integerrimis. *H. Cliff.* 190. The Quince-tree.

It is cultivated in Britain, Germany, France, and Italy; delighting in a moiſt fat ſoil, and flowering in April or May. The fruit and ſeeds are uſed. It retains its place in the London Diſpenſatory.

" Malus Cydonia, Græcis μηλεα κυδωνια, a Cydone Cretæ oppido, unde " primum advecta, Plinio, l. 15. c. 11. dicitur. Cotoneum malum primus " Cato, dein Plinius nominavit. Fructus μηλον κυδωνιον, Latinis Malum " cydoneum & cotoneum: Officinis Citonium." *B. P.* Cotoneum malum " unde dictum? Neſcio. " Hujus arboris fructus aurea Heſperidum mala, " tantopere veteribus decantata fuiſſe, multis probat Goropius & Bod. a Sta- " pel, quorum argumenta apud ipſos vide." *R. H.* 1452. & *Bod. in Theophr.*

SECT. II.

The fruit is antiſeptic and aſtringent; called ſtomachic; and commended in vomitings, fluxes, hæmorrhages, &c. The ſeeds contain an antacrid mucilage, chiefly uſed in gargariſms, collyriums, and clyſters.

" Mala cotonea ſtomachica ſunt, refrigerant 1. ſiccant 2. aſtringunt; nu- " triunt. Uſus præcipui in vomitu, alvi fluxu, ſingultu, laxitate ſtomachi. " N. B. ante cibum ſumpta alvum conſtipare creduntur, e contra a paſtu " laxare. Semen refrigerat & humectat, mucilagine ſua lenit, acrimoniam " obtundit. Uſus præcip. ad linguæ ariditatem leniendam (gargaris.); ad do- " lorem hæmorrhoidum ſedandum (in clyſteribus); ad ophthalmiam ſedandam " (mucilago cum aqua roſarum facta & impoſita); ad ſciſſuras mammarum ſo- " lidandas, ambuſtaque curanda, &c. *Præpar.* Condita, vinum, rob diacy- " donium, marmelata, miva Cydoniorum ſimplex, miva Cydoniorum aroma- " tizata, diacydonites ſimplex, diacydonites compoſitum, diacydonites laxati- " vum, eſſentia ſeu ſpiritus, & 13. Oleum per infuſionem. *Schrod.* 582.

1. It is, whilſt raw, of a harſh acidulous aſtringent taſte, and very odoriferous; but boiled, or in marmalade (from *marmellos*, a quince in *Spaniſh*) it is pleaſant enough, and gives a fine flavour to apple-pies: the ſeeds are viſcid and mucilaginous. " Pulpa odora, adſtringens & ſubacida; ſemina viſcido " quodam lentore lubrica, quem in aquam dejecta deponunt, & ipſam muci- " laginoſam reddunt." *J. B.* 28. i. *R. H.* 1453. and *Geoff.* iii. 368. who adds: " Fructus odorem gratum quidem ſed vehementem ſpargunt, & qui quorun- " dam capita ita percellit, ut ipſis dolorem moveat, præſertim ſi conclavi in- " cluſi habeantur. Some very common apples have the ſame effect. " Fruc- " tus ſaporis acido auſteri; ſemina valde mucilaginoſa & temperata." *Nucl. Belg.* p. 97. — 2. Quinces are ſaid to enervate or weaken the force of poiſons by their ſmell; ſpecifically to correct virulent cathartics, as hellebore, &c. and if much eaten by a pregnant woman, to procure her an induſtrious and ingenious child, &c. *J. B.* i. 32. col. 2. qui de Malo cotonea tractat a p. 27. ad 35. of which three pages are on its vires & uſus. " Si marmelatam rubram " deſideras Cydoniorum ſegmenta in vaſe operculato & diutius coquenda ſunt: " ſi albam velis, in vaſe aperto res peragenda, nec tamdiu coquenda ſegmen- " ta." *R. H.* 1454. You have the analyſis pulpæ, *Geoff.* iii. 368. where the fixed ſalt is omitted: See *Sylvii de le Boe* effectus mirabilis & valde laudabilis ſyrupi ſeu mivæ Cydoniorum. *Ibid.* p. 370.

The Pharm. Edinb. retains a gelatina ſeu miva Cydoniorum. In the New Lond. Pharm. there is a ſyrupus Cydoniorum, which is a miva Cydoniorum aromatizata; & a mucilago ſeminum Cydoniorum, thus: " R. ſem. Cydon. ʒj.

" aquæ

" aquæ ℥vj. Coque leni igne, donec aqua fere inſtar albuminis ovi lenteſcat; " tum per pannum linteum trajice." p. 77. " An ounce will render three " pints of water thick and ropy, like the white of an egg." *New Diſp.* p. 122.

MESPILA.

SECT. I.

Meſpilus. *offic.* Meſpilus Germanica, folio laurino non ſerrato, ſive Meſpilus ſylveſtris. *B.P.* 453. *T.* 641. Meſpilus. *Dod.* 801. *R.Syn.* 453. Meſpilus ſativa. *Ger.* 1453. Meſpilus vulgaris. *J.B.* i. 69. *R.H.* 1460. Meſpilus vulgaris, ſive minor. *Park.* 1422. Meſpilus, foliis lanceolatis, integerrimis, ſubtus tomentoſis, calycibus acuminatis. *H. Cliff.* 189. The common Medlar-tree.

It grows in the woods in Germany; where it is alſo cultivated in orchards, as well as in Britain, France, and Italy; flowering in April. The fruit is uſed. " *Officin.* Fructus, officula, folia." *Schrod.* 626. " *Uſu.* Fructus, ſemen." *Dale* 289.

" Meſpilus arbor Græcis μεσπιλος & μεσπιλη, fructus μεσπιλον, dicitur; " cujus Dioſcorides, l. 1. c. 169 & 170. duo genera facit; alterum quod a " nonnullis ἀρωνια vocatur, ſpinoſa eſt . . . . alterum in Italia naſcitur, quod " nonnulli ἐπιμηλιδα, alii ſetanium nominant: arbor eſt malo ſimilis & foliis, " niſi quod minoribus; habet fructum rotundum eſculentum, latiore umbilico " (leviter aſtringentem, quique tarde matureſcit). At Theophr. 3. hiſt. 12. Meſpili tria genera, &c." *B. P.*

SECT. II.

Unripe they are more aſtringent than quinces; ripe, or rather rotten, they are more acid: but they are little uſed.

" Meſpila refrigerant, ſiccant, ſaporis ſunt auſteri, aſtringunt, conſtipant " valide, ventriculo noxiæ ſunt, præcipue dum duriuſcula adhuc extiterant, " emollita enim aſtringunt levius, nocentque minus, ac facile putreſcunt. " Uſus eſſe poſſunt in diarrhœa, dyſenteria. Extrinſecus in vomitu, fluxu " alvi ſiſtendo (cataplaſm.) impoſita. Officula (lapilli, acini) commendantur " ſummopere ad calculum atterendum & expellendum. Folia ſimilem vim " cum fructibus obtinent, adeoque & iiſdem indurationibus inſerviunt; & " præcipue in gargariſmis, balneis uterinis. *Præp.* Conditi fructus." *Schrod.* 626. They are ſo auſtere as not to be eatable while hard; but when they rot, or turn ſoft, they are not ſo diſagreeable, though ſtill aſtringent and acid. " Fructus caro dura, aſtringens valde; quæ tamen fracida reddita, acidulum " ſuavemque acquirit ſaporem." *J. B.* " et menſis ſecundis inſtruendis inſer- " vit," addit *R.H.* " Fructus immaturi, ſunt valde acerbi, maturi vero ſapo- " ris ſunt vinoſi, dulcis & grati." *Nucl.Belg.* 196. And they are commended in fluxes and hæmorrhages. " Meſpila viridia in magna quantitate devorata, " multos diarrhœa pertinaci laborantes ſanaverunt, aliis remediis nihil pro-

" ficientibus." *E Foreſto. R.H.* & *Boerh. Hiſt. Plant.* p. 411. According to *Schol. Salern.* 566. Multiplicant mictum, ventrem dant Meſpila ſtrictum.

" Meſpila dura placent, ſed mollia ſunt meliora." As for the lithontriptic virtue of the ſtones, I believe no body now believes it. Vid. *J.B.* i. 71.

MYROBALANI.

SECT. I.

1. Myrobalanus Chebula. *offic.* Myrobalani maximi oblongi anguloſi, pituitam purgantes; Arabibus Quebolia & Quebulgi. *B.P.* 445. Myrobalanus Chebulæ citrinis ſimiles, nigricantes. *J.B.* i. 205. Myrobalanus, Chebula. *Ger.* 1500. *Park.* 246. *R.H.* 1531. Chebule Myrobalans—which are the largeſt and longeſt, five-ridged, wrinkled, of a dark brown or blackiſh colour, and ſubacid aſtringent taſte.

2. Myrobalanus Citrina. *offic.* Myrobalani teretes Citrini, bilem purgantes; Arabibus Azafar. *B.P.* 445. Myrobalani Citrinæ. *J.B.* i. 205. Myrobalanus Citrina, *Ger.* 1500. *Park.* 246. *R.H.* 1531. Yellow-Myrobalans.—Theſe are ſomewhat ſmaller than the former, more highly ridged, leſs wrinkled, of a yellowiſh colour, and very auſtere taſte.

3. Myrobalanus Bellerica. *offic.* Myrobalani rotundæ Bellericæ; Arabibus Belleregi, Bellileg, Belligu. *B.P.* 445. Myrobolani Bellericæ rotundiores, *J.B.* i. 206. Myrobalanus Bellerica. *Ger.* 1500. *Park.* 247. *R.H.* 1532. Bellerick-Myrobalans.—Theſe are rounder and plumper than the former, about the ſize of galls, of a browniſh yellow colour, and auſtère taſte.

4. Myrobalanus Emblica. *offic* Myrobalani Emblicæ; Arabibus Embelgi, Embleg, Ambegu. *B.P.* 445. M. Emblicæ, in ſegmentis, nucleum habentes, anguloſæ. *J.B.* i. 206. Myrobalanus Emblica. *Ger.* 1500. *Park.* 247. *R.H.* 1531. Emblick Myrobalans.—Theſe are roundiſh, of a dark grey colour; and eaſily ſeparate into three or ſix ſegments, diſcloſing their ſix-cornered ſtone: they are pretty acid and ſubaſtringent to the taſte.

5. Myrobalanus Inda, Myrobalanus nigra. *offic.* Myrobolani nigræ, octangulares; Arabibus Aſuar. *B.P.* 445. Myrobalani Indæ nigræ ſine nucleis. *J.B.* i. 204. Myrobalanus Indica. *Ger.* 1500. *Park.* 247. *R.H.* 1531. Indian or Black Myrobalans.—Theſe are ſolid, black, oblong, ſlenderer than any of the former, and commonly without ſtones, of an acid ſubaſtringent taſte.

They are all ſtone fruits, though the Indian often wants a nucleus; and are brought from the Eaſt-Indies, though ſeldom, as being little, if ever, uſed. For a fuller deſcription of them, you may conſult *Dale* 305. *Lemery's Dict.* 369. *Geoff.* ii. 327. or the authors above cited. The trees which bear them are little known.

Myrobalanus ſignifies glans unguentaria, or is much the ſame with Balanus Myrepſica. " Hanc appellationem interpretes Arabum, quo ſomnio inducti " non ſatis ſcio, tribuerunt fructibus quibuſdam exoticis, quos Arabes ipſi " Halilegi nuncupant." *Hoffman.* p. 43. " Myrobalani Arabibus inventi, & " ex recentioribus Græcis, Actuario cogniti: hos Avicenna, generis nomine " *Dilegi*, & Serapio *Hartileus*, donavit: quorum interpretes, cum viderint " quodam-

" quodammodo ad glandis formam accedere, improprie Myrobalanos verte-
" runt. Genera quinque ſunt, quæ Actuario μυρο βαλαναξανθα, κεβυλα, ιν-
" δικα aut ἑλαμασωνια, ἱμπειλιτικα, βελλιτικα dicuntur." *B. P.* Vid. *Actuar. Med.* l. 5. c. 8. p. 274. *B. & Meſue Simpl.* l. 2. c. 2. p. 27.

" Omnes medici Arabes mihi affirmarunt omnia Myrobalana *Delegi* vocari.
" Peculiariter vero flava *Azfar*, Indica ſive nigra *Aſuat*; Quebula *Quebulgi*;
" Pellerica *Beleregi*, & Emblica *Embelgi*, quæ intelligit Avicenna ſub Sinii
" nomine, l. 2. c. 449. . . . Quinque ſunt diverſa arborum genera, & in re-
" gionibus 60 aut 100 leucis inter ſe diſtantibus naſcuntur. Proveniunt enim
" nonnulla in Goa & Batecala, alia in Malavar & Dabul. In toto regno
" Cambaiæ quatuor eorum genera inveniuntur: Quebula vero in Biſnagar,
" Decan, Guzarate, & Bengala." *Garzias Cluſ. Exot.* 194. Vid. quæ *Acoſta* habet *Ibid.* p. 270. " Recentiores quinque Myrobalanorum differentias hoc
" diſtycho comprehendunt,

" Myrobalanorum ſpecies ſunt quinque bonorum,
" Citrinus, Chebulus, Bellericus, Emblicus, Indus." *J. B.* i. 202.
" Chebulus & Citrinus, Belliricus, Emblicus, Indus." *Hoffman.* 43.
" Sunt Chebulæ, Citrinæ, Belliricæ & Emblicæ & Indæ."

Marg. M. M. contract.

" Actuarius is the firſt Greek writer who has mentioned or deſcribed the
" milder ſorts of purging medicines, ſuch as caſſia, manna, ſena, Myroba-
" lans: the two laſt he ſays were brought from foreign parts to his country,
" *i. e.* from Syria to Egypt. . . . He profeſſedly takes them from the Ara-
" bians, whom he calls Barbarians, who without diſpute firſt introduced theſe
" ſimples into phyſic. He gives the ſame account of the three ſorts of Myro-
" balans as they do, and quotes the name of the Emblicæ & Belliricæ in their
" own language. Theſe two laſt, though in their qualities they have a great
" affinity with the Myrobalans, yet are here diſtinguiſhed from them, as they
" are indeed by all the Arabians. Myrepſus ſeems to be the firſt who con-
" founds them with the Myrobalans, and therefore mentions five ſorts of
" them, as the moderns do generally after him." Vid. *Friend's Hiſt.* i. 271.

SECT. II.

They are all aſtringent, yet called purgative; and commended in the dyſentery, and other fluxes: but they are now-a-days very little uſed.

" Myrobalani citrini ſeu flavi, bili flavæ educendæ apti nati ſunt: Indi ſeu
" nigri, bili atræ: Chebulæ pituitæ ac poſtea bili: Emblici ac Belliricæ, iti-
" dem pituitæ. Doſis a ʒvj. ad ʒiß. *Præp.* 1. Pilulæ de quinque generibus
" Myrobalanorum. 2. Extractum Myrobolanorum." *Schrod.* 771.

1. They are all ſomewhat acid, and aſtringent more or leſs to the taſte. I can diſcover no acrimony or heat in any of them. — 2. I mixed a decoction of one chebule and two citrine Myrobalans with a ſolution of vitriol, and had inſtantly a good bluiſh black ink, which kept its colour better than what I made with galls the ſame way (*Martii* 1. 1726.) " Indi his utuntur Myrobalanis
" (an Emblicis tantum, aut omnibus?) ad depſanda coria, & atramentum
" con-

" conficiendum." *Geoff.* ii. 331. — 3. Although they are much commended by the Arabians as cathartic, yet they owned that they corrugate the ſtomach and inteſtines, operate too ſlowly, and were aſtringent; and hurtful to obſtructed viſcera: and ſo wanted to be corrected by acria aperientia, diuretica, lubricantia, oleoſa, &c. Vid. *Hoffman*, p. 44. and *J. B.* i. 207 to 209. The decoctum epithymi, the laſt compoſition in the *Pharm. Lond.* 1721. in which there were any Myrobalans, was omitted by Quincy as ſeldom ordered. And now the whole five Myrobalans are, I think, juſtly excluded the *London M. M.*

" Chebulæ conditæ, autore Meſue, ventriculum firmant, appetentiam in-
" vitant, coctionem promovent, rationalem animæ partem vegetam reddunt,
" viſum acuunt, &c." *R. H.* 1532. " A Marſilio Ficino ad vires viſceraque
" roboranda, & homines a ſenectutis ſqualore præſervandos (Myrobalani) lau-
" dantur." *Boecler. in Herm. Cynoſ.* p. 350. There is an imaginary analyſis omnium Myrobolanorum; and the effect of their infuſion on the blue paper twice ſet down in *Geoff.* ii. 331.

NUCES CUPRESSI.

SECT. I.

Cupreſſus. *offic.* Cupreſſus. *B. P.* 488. *Dod.* 856. *J. B.* 1, 2, 280. *Park.* 1476. *R. H.* 1406. *Park.* par. 602. Cupreſſus ſativa & ſylveſtris. *Ger.* 1367. Cupreſſus meta in faſtigium convoluta, quæ fœmina Plinii; (& Cupreſſus ramos extra ſe ſpargens, quæ mas Plinii.) *T.* 587. Cupreſſus foliis umbricatis erectis. *H. Cliff.* 449. The Cypreſs-tree.

It is a native of Candy: but bears our winters pretty well; though the froſt in 1683 killed almoſt all the Cypreſſes in England. *R. H.* It is a large tree, and its wood very durable. The gates of *St. Peter*'s church at *Rome*, which laſted from the days of Conſtantine the Great to Pope Eugenius IV. (i. e. more than 1094 years) intire, " non tantum incorruptæ, ſed nitentes & novis ſimi-
" les," were made of it. The Egyptian mummies are often found in Cypreſs cheſts. It is even ſaid never to rot, but to continue always of a good ſmell. Vid. *R. H.* It is not only the κυπαρισσος Græcorum; but probably alſo the gopher-wood of the Hebrews, whereof Noah's ark was made. See Biſhop *Patrick*'s Comment, vol. i. p. 34.

The fruit is chiefly uſed, and called Cupreſſi nuces, coni, pilulæ, galbuli, Cypreſs-nuts or cones; which are roundiſh, about the ſize of ſmall walnuts, of a brown colour, bitteriſh aſtringent taſte, and little ſmell. " *Officin.* Lig-
" num, fructus, & raro folia. N. B. Fructus ſive conos, nuces vel pilulas
" Cupreſſi officinæ nominant; aliis gabulæ dicuntur." *Schrod.* 577. Cupreſſus, κυπαρισσος, is not deſcribed by *Dioſcorides*, l. 1. c. 102. p. 54. but *Theophraſtus* gives many characters of it. " Theophr. 1. hiſt. 8. procero & longo
" caudice conſtat, tamen macilento: 1 hiſt. 13. Mas nodoſior eſt fœmina:
" 1 hiſt. 14. Simplici aſſurgit caudice ad longitudinem, ſed non multis radi-
" cibus, neque ramis frequentibus patet: 1 hiſt. 15. Viret perpetuo: 2 hiſt.
" 3. Plerumque ex fœmina marem provenire affirmant: 1 cauſ. 5. hujus
" fructus non id totum eſt, quod pilæ ſpeciem gerit, ſed quod cono innaſcitur,
" præ-

" prætenue exile, & quaſi laricis ſemini proximum, quod pilula ſua dehiſcente " delabitur." Vid. *B. P.*

SECT. II.

It is aſtringent; and commended in fluxes, mictu involuntario, fluore albo, dyſenteria, hæmorrhages, hernias, &c. given in ſubſtance to ʒj.

" Lignum refrigerat, ſiccat, aſtringit. Fructus & folia calfaciunt parum, " exiccant ad gr. 3. aſtringuntque valide, proin uſus ſunt præcipui, in hæmop- " tyſi, diarrhœa, dyſenteria; commendantur itidem in mictu involuntario, ut " & in herniis curandis, intus & extus exhibita." *Schrod.* 577.

1. They are of a bitteriſh, aſtringent, and ſomewhat reſinous taſte; and yield in hotter countries a ſort of turpentine. *R. H.* 1404 & 1408. " Sapor " acerbus potiſſimum in pomo elucet. Ligni odor ſuavis, ſapor vero vix ullus " excellens, præterquam in cortice, qui evidenter linguæ offert adſtrictionem " cum amarore, eoque haud ingrato in veteri quod exceſſit 30 annos." *J. B.* " Analyſi chymica ex nucum Cupreſſi recentium prodierunt humorum ℔iij: " ʒv. ʒivß. olei ʒiij. ʒv. gr. xxxv; carbonis ʒxiv. ʒviß, unde cinerum ʒij. " gr. xviij. ac inde ſalis fixi alcali ʒj. gr. xlix. (ergo terræ ʒvij. gr. xli;) & " jactura fuit ʒvij. ʒvij." according to *Geoff.* iii. 385. But here the quantity is only ℔iv. ʒxv. ʒvij. gr. xxxv. ſo that gr. xxxvij. are wanting. " Fructus " inter adſtringentes ſunt celeberrimi uſus. . . Inſuper vis febrifuga illis tribui- " tur. Eorum pulvis ad ʒj. in vino maceratus propinatur in febribus inter- " mittentibus, vel etiam in quartana, eandem doſin quarta quaque hora re- " iterando." *Geoff. ibid.* — 3. Dioſcorides commends the leaves internally in veſicæ rheumatiſmo & dyſuria; and the pilulæ in diarrhœa, dyſenteria, tuſſi, orthopnæa, hæmoptoe, hernia, &c. and outwardly for inflammations, wounds, and ulcers. " Nuces ſerviunt gargariſmis affectuum calidorum oris & fauci- " um." *Hoffman* 271.

NUCISTA.

SECT. I.

Nuciſta, Nux moſchata, Nux myriſtica, *offic.* Nux moſchata, fructu rotundo; Chryſobalanos Galeni quibuſdam. *B. P.* 407. Nux aromatica, vulgo moſchata. *J. B.* i. 255. Nux moſchata rotunda, ſive fœmina. *Ger.* 1536. Nux moſchata. *Park.* 1600. *R. H.* 1522. Myriſtica. *Lin. Gen. Pl.* p. 524. N°. 1016. The Nutmeg-tree.——And Macis. *offic.* Macis officinarum. *B. P.* 407. Macis ſeu ſecundum involucrum Nucis myriſticæ. *R. H.* 1524. Mace.

It grows in the Bandas—ſome of the Molucca iſlands, belonging to the Dutch, who conquered Banda with its dependencies in 1621; ſince which time they have been ſole maſters of this branch of commerce. vid. *Savary's Dict.* i. 1205. Pere Labat ſays a Dutchman once carried a Nutmeg-tree to Guadalupa, an iſland in America belonging to the French, where it proſpered very well, till another Dutchman rooted it up and burnt it in the night. *Savary's Dict.* iii. 2, 348. *Did Banda belong once to England?* It

It is a pretty large ever-green tree, having always both flowers and fruit on it; and yields commonly three crops of fruit annually, viz. in April (which is the beſt), Auguſt, and December. The fruit reſembles green walnuts, conſiſting of an outſide fleſhy coat; of the mace ſpread over a woody, dark brown, thin ſhell; and the Nutmeg within it. "The beſt Nutmegs are firm "and weighty, and being pierced by a needle or pin emit an oilineſs." *Miller's Bot.* 315.

The Nux moſchata maſcula, *i. e.* Nux moſchata fructu oblongo, *B. P.* 407. is reckoned a wild or degenerate ſort; neither it nor its mace being near ſo aromatic as the common nutmeg and mace; ſo that it is never uſed. It grows, they ſay, in many parts of the Eaſt-Indies, eſpecially in the iſland Candore. Vid. *Savary's Dict.* ii. 838.

"Nux moſchata veteribus Græcis, cum ſua mace, incognita fuit, at recen-"tioribus μοσχο καρυον, vel καρυον ἀρωματικον dicitur: forte Nux Indica, in "ſuffimento Moſchato Aëtii." *B. P.* "J. Bauhino, ut & Guillandino Coma-"cum Theophraſti, Cinnamum & Caryopon Plinii eſſe videtur. Idem & Chry-"ſobalanon Galeni eſſe ſuſpicatur." *R. H.* But probably we had them from the Arabians; and Avicenna is the firſt who mentions them.

"Eligenda Nux recens, gravis, pinguis, & quæ acu puncta ſuccum oleo-"ſum remittit. Macis probatur odore ſuavi, ſapore ſubacri, colore flavo." *Schrod.* 629.

SECT. II.

They are attenuant, carminative, anodyne, diaphoretic, and diuretic; ſaid to be cephalic, ſtomachic, and uterine; and are commended in want of appetite, indigeſtion, vomiting, flatulent colics, palpitation of the heart, fainting, ſtrangury, &c. The mace is reckoned the ſtrongeſt of the two.

"Nux calfacit & ſiccat, ſubaſtringit, eſt ſtomachica, cephalica, uterina, "diſcutit flatus, coctionem juvat, halitum fœtidum oris emendat, fœtum re-"creat, lipothymiæ & palpitationi cordis ſuccurrit, lienem minuit, alvi fluores "compeſcit, vomitum ſiſtit. Maci eædem vires adſcribuntur, quia tamen par-"tium tenuiorum exiſtit, ideo & operando efficacior, & magis penetrans ha-"betur. *Præpar.* Nuciſtæ conditæ, confectio macis, aqua nuciſtæ, oleum "nuciſtæ ſtillat. (cujus doſis gr. iii. iv.) oleum nuciſtæ expreſſum, ſal nu-"ciſtæ; oleum macis ſtillat. (cujus doſis gr. iii. iv.) oleum macis expreſſum, "extractum, balſamus macis, balſamus nuciſtæ." *Schrod.* 629.

1. Nutmegs are of a warm, aromatic, bitteriſh yet agreeable taſte; and pleaſant ſpicy ſmell: the mace is ſomewhat hotter and more fragrant: both are very oily. "Nux moſchata eſt ſapore & odore aromatico & ſubaſtringente: "macis ſaporis jucundiſſimi, aromatici, acriuſculi, cum amarore quodam." *J. B. R. H.* "Macis odoris aromatici pergrati; ſaporis acris & aromatici, "cum amarore quodam. Nux moſchata eſt odoris eximii, ſaporis acris cum "ſuavitate amaricantis." *Geoff.* ii. 439. "Nux odoris ſuavis & fortis, præ-"cipue dum teritur, ſaporis, calidi & aromatici." *Nucl. Belg.* 209. "Macis "odoris fortiſſimi & grati, ſaporis maxime aromatici calidi." *Ibid.* 210. Nutmegs ℥xvj. yield by expreſſion olei ℥iij. ʒij; while from the ſame quantity of aniſe ſeeds, olei ʒx can ſcarcely be got. Vid. *Lemery's Chym.* 603. — 2. Their oils

oils are anodyne and somniferous (*externe* et *interne*) as are the substances themselves. "Conditæ in India nuces pollent insigni facultate narcotica, qua largiore usu soporosos invehunt affectus. Hinc non dissimile veri est quod tradit D. Tavernier; *nimirum* cum hæ nuces matureſcere incipiunt aves paradisiacas harum vescendarum avidas, magnis gregibus ad Moluccas insulas convolare, non secus ac turdos vindemiæ tempore in Galliam; nec tamen deliciis suis impune fruuntur: nam cum fructibus hisce ad satietatem se ingurgitarunt, vertigine correptæ, in terram velut ebriæ decidunt, ubi jacentium crura formicæ brevi comedunt." *R. H.* 1524. "It is observable of the nutmeg-tree, it is never planted; but, when the nutmegs are ripe, several birds come from the islands towards the south, and devour them whole, but are forced to throw them up again before they be digested: the nutmeg then besmeared with a viscous matter, falling to the ground takes root, and produces a tree, which would never thrive if planted." *Tavern. Harris Col.* ii. 373. But! travellers take liberties. "Memini generosam Anglam gravidam esu 10 vel 12. nucum myristicarum ebriam deliraſſe." *Lob. Obs.* 570. *J. B.*'s story is more remarkable: "In mea juventute, quum ego (J. Bauhin) pedes Florentia redirem, & in Apenninis montibus frigidam avidius bibissem, subito incidi in insignes ventris dolores, flatibus in scroto vexantibus, accedente tumore, sine tamen ulla hernia præcedente aut subsequente. Cum existimarem me in monte præ doloribus periturum, itineris socius Osualdus Gabelckouer amice obtulit nuces moschatas quas secum habebat. Devoratis quatuor, subito per Dei gratiam & hoc remedio, liberatus fui a doloribus, atque iter perfeci sospes & incolumis." *J. B.* i. 260. "Revera non minus periculi est in maci quam in nuce, si copia peccetur. Novi matrem, quæ cum filiæ plusculum dediſſet ad movendos menses, animadvertit in illa delirium aliquot horarum." *Hoffm.* 399. — 3. They are commended also for the hickup, palsy, difficult labour, mensibus obstructis, diarrhœa, dysenteria, &c.

SECT. III.

They may be given in substance to ʒj. and sometimes to ʒss: the essential oil of either to gut. iv: oleum expressum to gr. viij. The nux condita comes from the Indies, and is used in the electuarium cardiacum. The nutmeg is an ingredient in the aqua raphani composita & trochisci cardialgici; ejus ol. stillat. in the spirit. lavendulæ compositus, spiritus salinus aromaticus, & elixir vitrioli: the mace in aqua absinthii composita, aqua mirabilis, & pulvis diarómatων; and its oleum expressum, in the emplastrum stomachicum.

"Macis oleum, ut oleo nucis quantitate cedit, sic qualitate antecellit: magisque commendatur in nervorum affectibus, & aliis frigidis morbis: quin & podagram pedi oblitum sanare Cronemburgius refert." *R. H.* 1524.

"The oil of nutmegs by expression is usually called oil of mace, in the shops; it is brought from Holland in square flat cakes, and is believed to be mixed with suet, or some other unctuous matter. There is an oil of mace by expression sometimes to be met with, but very rarely: it is of a liquid form, but somewhat thick and curdled, and of a reddish-brown colour, having the perfect smell of mace with a little sourness." *Mil. Bot.* 316.

NUCES VOMICÆ. *Vide* p. 37. ſupra.
PAPAVER. *Vide* Opium infra.

PASSULÆ.

SECT. I.

Vitis, Vitis vinifera. *offic.* Vitis vinifera. *B. P.* 298. *J. B.* ii. 67. *Dod.* 415. *Ger.* 875. *Park.* 1555. *R. H.* 1613. Vitis foliis palmato-angulatis. *H. Cliff.* 74. The Vine, or Vine-tree, or manured Vine . . . of which there are many varieties: but it differs not ſpecifically from the

Vitis ſylveſtris, Labruſca. *B. P.* 299. *T.* 613. Labruſca. *Lugd.* 1406. Labruſca, ſive vitis ſylveſtris Europæa. *Park.* 1555. Vitis ſylveſtris Virginiæ. *B. P.* 299. Vitis ſylveſtris Virginiana. *Park.* 1556. *R. H.* 1615. Vitis fructu minore rubro acerbo, folio ſubrotundo minus laciniato, ſubtus alba lanugine tecto. *Sloane's Cat.* 171. *Hiſt.* ii. 104. The Wild Vine of Europe, and of Virginia.

It grows in South France, Spain, Italy, &c. and is cultivated in every country where there is ſun enough, and not too much, to ripen the fruit. It flowers in June, and the fruit is ripe in September and October. The Vine furniſhes the ſhops with ſeveral ſimples, as, 1. Folia, pampini, (the leaves; capreoli, (the tendrils); & palmites (young ſhoots). 2. Lachryma, ſuccus, aut aqua vitis (which is the juice iſſuing from wounds made in the Vine in April. 3. Omphacium, *vulgo* agreſta; ſuccus uvarum immaturarum, (Verjuice). Ὀμφαξ is uva immatura, unde omphacius, & omphacinus. Agreſta, vox Latino-barbara, denotes commonly verjuice; but ſometimes unripe grapes are called agreſtæ. Vid. *Schrod.* p. 702 and 727. Agreſtis ſuccus and agreſtes uvæ properly ſignify the juice and grapes of the Labruſca. 4. Uvæ maturæ, ripe grapes.) 5. Uvarum acini, vinacei, gigarta, (grape-ſtones). 6. Vinum; & inde ſpiritus, acetum, tartarus.

The grapes, when dried, are by us called raiſins; of which we have two ſorts. 1. Paſſulæ, uvæ paſſæ, & paſſulæ majores. *offic.* There are different ways of making them, (Vid. *Ray*'s Journey, *Harris's Col.* ii. 591.); ſome cutting half through the foot-ſtalk of the cluſters, let them dry on the trees; others dipping them in boiling lye, dry them afterwards in the ſun. *Savary's Dict.* ii. 1270. They come from Spain: and are Paſſulæ damaſcænæ. *off. Dale* 320; Paſſulæ maximæ, ſeu damaſcenæ, zibebæ dictæ. *Schrod.* 702; Uva paſſa major βαμαστος Græcis. *B. P.* 299. Damaſk raiſins are ſometimes uſed as a ſweetmeat, but not in medicine here. 2. Paſſulæ minores, uvæ paſſæ minores; uvæ Corinthiacæ. *offic.* Uvæ paſſæ, minores; vel paſſulæ Corinthiacæ. *B. P.* 299. Vitis Corinthiaca, ſive apyrina. *J. B.* ii. 72. *R. H.* 1614. *T.* 613. Paſſulæ Corinthiacæ. *Park.* 1557. The Currant-Vine. It grows not about Corinth now, but is cultivated in Zant, Cephalonia, Nathaligo, and other iſlands belonging to the Venetians. Vid. *Savary's Dict.* ii. 1269.—"Genera vitium "innumera atque infinita eſſe prodiderunt, quod verius apparebit de vinis." *Plin.* l. 14. c. 2. p. 340. "Duo ſunt liquores corporibus humanis gratiſſimi, "intus vini, foris olei, arborum e genere ambo præcipui, ſed oleum neceſſa-

" rius. Nec ſegniter vita in eo elaboravit. Quanto tamen in potu ingenio-
" ſior apparebit, ad bibendum generibus centum nonaginta quinque, ſi ſpecies
" vero æſtimentur, pene duplici numero excogitatis, tantoque paucioribus
" olei." *Plin.* l. 14. c. 22. p. 355. For the wines in uſe in Britain, ſee *R. H.* 1617. See alſo *Savary's Dict.* ii. 1950. And for the nature and effects of fermentation, without which neither wine nor vinegar can be produced, vid. *Boerh. Chem.* ii. Proceſ. 42 and 50. We ſhall conſider tartar amongſt the concreted juices.

Among the many treatiſes on wines, *Andreæ Baccii*, *Elpidani*, de naturali vinorum Hiſtoria, de vinis Italiæ, & de conviviis antiquorum, L. vii. acceſſit de factitiis & cerviſiis: deque Rheni, Galliæ, Hiſpaniæ, & de totius Europæ vinis; & de omni vinorum uſu compendiaria Tractatio (Romæ 1596, 1597, 1598. and Francofurti 1607. all in folio) is reckoned a ſtandard book. See its character in *R. H.* p. 1617.

SECT. II.

Raiſins and currants are antacrid, diluent, laxative, and nouriſhing; called pectoral; and commended in coughs, conſumptions, ſcurvy, obſtructions in the hypochondriac viſcera, heat of urine, &c. The ſtones are aſtringent, but mildly ſo.

Wine warms and comforts the ſtomach, chears the ſpirits, and invigorates all the functions: hence it is a noble cordial, if uſed medicinally; but taken to exceſs it intoxicates, is ſomniferous, and almoſt narcotic, making ſome furious, and others ſtupid.

N. B. *Vinegar* (which is prepared from wine) is an acid, antiſeptic, and the moſt efficacious as well as ſafeſt of all the ſtrong vegetable acids; eſteemed as an alexipharmic; and is commended in ardent, putrid, and malignant fevers, bites of ſerpents, lethargies, convulſions, drunkenneſs, as an antidote to narcotic poiſons, &c. But verjuice has the virtues of acetoſa, being aſtringent, but neither ſo ſubtile nor ſo light as the vinegar.——The lachryma vitis differs not much from water; it is commended for the gravel and ſore eyes. The young ſhoots, leaves, and tendrils, are ſubaſtringent; but little uſed.

" Folia, capreolique refrigerant, aſtringunt valide. *Uſus* præcip. in dyſen-
" teria, vomitu, pica, expuitione ſanguinis, aliiſque hæmorrhagiis ſiſtendis,
" (ſuccus expreſſus aſſumitur). Extrinſecus refrigerant ac leniunt capitis do-
" lores ac æſtum, conciliant ſomnum in lotionibus pedum, ut & ipſi capiti
" adhibita."—Lachryma vitis, intrinſecus vim habere creditur atterendi &
" expellendi calculum: oculorum caligine medetur ac rubedini, inſtillata; im-
" petigines ſanat, ſi locus affectus, nitro antea fricatus, ea lavetur."—Agreſtæ
" refrigerant, ſiccant, aſtringunt. Proin poterit eſſe uſus earum in febribus
" ardentibus, excitant *ſcil.* appetitum, fluxum ventris ſedant, aſt ſanguinem
" indigeſtum procreant. *Vide* etiam omphacium.—Uvæ maturæ, calfaciunt
" & humectant 1. recenter deglutitæ generant inflammationes & cruditates
" ventriculi, diarrhœam & ſimiles: magis tamen id faciunt adoleſcentes, minus
" rufiſcentes. Exiccatæ uvæ ventriculo commodiores ſunt, appetitumque ex-
" citant, alvum laxant."—Paſſulæ omnes calidæ ſunt, ſeu temperatæ, leni-

" unt, alvum laxant, acrimoniam hebetant; ventriculo, pulmonibus ac epati " gratæ ſunt; tuſſim mitigant. Zibebæ dictæ, exemptis acinis (gigartis) in " aqua infuſæ, potum ægrotis exhibent ſat gratum, ſitique convenientem. " Acini vim habent adſtrictoriam, conveniuntque in vomitu, alvique fluxu, " ſive intrinſecus ſive extrinſecus adhibeantur (torrentur ſcil. & teruntur)." —" Vinacea (*i. e.* filiquæ cum acinis in expreſſione muſti refiduæ) magnarum " virium perhibentur in arthriticis doloribus ſedandis; ſi membrum affectum " vinaceis per ſe caleſcentibus imponitur. *Præpar.* 1. Cinis ſarmentorum. " 2. Loch paſſulatum. 3. Mel paſſulatum. 4. Conditæ paſſulæ laxativæ." *Schrod.* 702.

" Omphacium inſervit tam eſculentis quam medicamentis. Refrigerat 2. " ſiccat 1. Subſtantiæ eſt craſſioris, ſaporis acido-acerbi. Uſus præcipui ad " hypochondria ardentia, ſtomachi ardorem (orificio impoſitum) imo calidis " morbis omnibus feliciori juvamento eſt, quam acetum, quod præter refri- " gerandi vim & caliditate acri pollet, ſecus ac omphacium. *Præp.* Syrupus " de agreſta." *Id.* 727. " Acetum accedit proxime ad naturam vitrioli. . . . " Subſtantiæ eſt mixtæ, frigidæ ac calidæ (ſuperat tamen frigiditas calidita- " tem) in reliquis ſiccat; partium eſt tenuium, attenuat, penetrat, aſtringit, " putredini reſiſtit, ſudorem ciet; primaſque tenet, præ cæteris correctivis, " quorum opera gummi calfacientia, ſuccive venenati corriguntur. Per ſe " quoque ſingulare eſt remedium adverſus ictus ſerpentum etiam venenatiſſi- " morum, quales ſunt aſpides." *Quercet. Præp.* 1. Aceta diſtillata, N°. 6. " 2. Cryſtalli ex aceto." *Schrod.* 707.—" Spiritus vini calidus eſt & ſiccus, " penetrantiſſimus, incorruptibilis, reſiſtit putredini: refocillat apoplecticos, " comate oppreſſos, &c. Extrinſecus reſolvit tumores frigidos ac ſcorbuticos, " arcet coagulationem ſanguinis in contuſionibus, cruoremque reſolvit ac diſ- " cutit." *Schrod.* 752.

What our ſenſes can diſcover of theſe ſubſtances, together with their well known effects, and what has been ſaid of ſweet, ſubacid, and acid fruits, &c. ſufficiently explain their virtues. It is not amiſs however to notice the difference between the unfermented juice of the grapes and the ſame fermented, as well as between wine and vinegar, which is indeed very great. For—1. Muſt, grapes, or raiſins, by diſtillation, yield a great deal of inſipid water, not at all inflammable; whereas an ardent ſpirit, in conſiderable quantity, firſt riſes from wine; and from vinegar an acid ſpirit, which extinguiſhes fire. " If you di- " ſtill muſt, a great quantity of inſipid water riſes firſt, then a weak acid ſpirit, " and fœtid oil; and there remains a terreſtrial maſs or carbo, whence fixed " ſalt and earth may be obtained the common way." *Lemery's Chym.* p. 664. " Wine yields firſt an inflammable ſpirit, then a great deal of phlegm; next " an acid ſpirit, and fœtid oil, but not near ſo much oil as the muſt: and " from the remaining carbo a fixed ſalt may be got, like that of tartar." *Lemery's Chym.* p. 672. " Vini partes ſunt: 1. Eſſentia ſubtiliſſima incor- " ruptibilis *vulgo* aqua vitæ, aqua ardens, ſpiritus vini, ſulphur cœleſte, ſul- " phur bezoardicum vegetabile, menſtruum cœleſte, aqua cœlica, Lullii cœ- " lum, clavis philoſophorum, corpus æthereum ex aqua & igne conſtans, " balſamus volatilis liquoris catholici. 2. Magna copia aquæ inſipidæ cor- " ruptibilis. 3. Hanc ſequitur ſpiritus quidam fumidus, qui nihil aliud eſt, " quam ſal vini & volatile craſſius, in forma fumi aſcendens. 4. Huic mox

" ſub-

" ſubjungitur oleum quoddam vere pingue & unctuoſum, combuſtile, ſed " paucum. 5. Ex capite mortuo extrahitur ſal commune quoddam corroſi- " vum. 6. Poſt extractionem ſalis communis relinquitur terra limoſa in- " utilis. *Sala* in anatomia antimonii." *Schrod.* 751. " Acetum deſtillatur in " aquam acidam, ſpiritum acidum, liquorem acidiſſimum, ponderoſum fœti- " dum, & oleum miri nidoris; nigra remanente fæce acida; que igne aperto " exuſta dat fæces fuſcas, in quibus alcaleſcens ſal ſatis copioſus & acer." *Boerh. Chem.* ii. 215. But—2. Muſt cools, relaxes, purges: wine heats, ſtrengthens, binds; it alſo chears, intoxicates, ſtupifies; whereas vinegar calms, and is a remedy for drunkenneſs. Let us hear the Great *Boerhaave* on this ſubject: " Maturiſſimarum uvarum ſuccus meracus forte eſt diſſol- " vens humorum ſummum, immodico uſu dyſenteria lethali ſæpe necans. " Coctione ſpiſſum malti apozema, largius potum idem efficit. Fiat vero ex " priori forte antiquum vinum, ex poſteriori cerviſia generoſa vetus, aut de " utriſque ſpiritus ſtillatitius, & imprimis alcohol, dabit priorum antidoton. " Fermentatio (enim) convertit ſuccos vegetabiles, ex facultate ſua laxante, " reſolvente, ſaponacea, refrigerante, & purgante plerumque per alvum, in " potentiam corroborantem, cogentem humores, exſiccantem, calefacientem. " Natura vero vino unicuique communis, cognoſcitur præcipuè facultate ex- " citandi temulentiam in ſpirituum, actionumque animalium functione. Dum " excitat, reficit, animat, exhilarat; jocis luſibus, facundiæ, carminibus, ſal- " tibus aptat: poſtea proprios cuique latentes affectus incendit, promit, abſ- " condita revēlat; deinde ſenſus externos, internoſque, ut & voluntarios motus " turbat, debilitat, tollit, ut nec pes, neque manus, neque lingua, neque mens " officium faciat. Tum ſoporem, paralyſin, apoplexiam, mortem denique " facit. Hæc autem vini propria virtus habetur. Nec ſimilis in ulla alia re " mihi hactenus cognita proprietas eſt. Nam hyoſcyami, nicotianæ, opii, " ſtramonii, longe alia eſt ratio, dum cerebrum turbant. Eſtque in omni " vino fere eadem: quia cerviſia, hydromel, pomatum, pyratum, vinum " groſſulariæ, uvarum, aliarum baccarum rite confectum, ſemper idem efficit: " ut ita mirabilis hæc poteſtas ſoli ſit fermentationis virtuti propria." Vid. *Chem.* ii. 182. All which are owing to the inflammable ſpirit which wine " contains, and is produced only by fermentation. According to *Macquer*, wine by diſtillation yields about a fourth part of inflammable ſpirit, or eau-de-vie, (ch. prat. 2. p. 201.) which conſiſts of pure ſpirit, and more than an equal quantity of water, which by rectification can be ſeparated. And even when reduced to an alcohol, *Van-Helmont* ſays, by diſtilling it with ſalt of tartar, one half of it becomes pure water. This did not ſucceed with *Boerhaave*; but Mr. *Macquer* thinks it practicable. For ſince it conſiſts of acid, oil, and water, it may be decompoſed, by ſeparating the acid, by a fixed alcali; as the oil may be deſtroyed by ignition. For when it is burnt under a bell, as they do ſulphur, a great quantity of water is collected. Vid. *Macq.* l. c. p. 212. &c. — 3. Vinegar is not wine corrupted, more than wine is muſt corrupted, but produced of wine by a ſecondary fermentation. Strong wine affords ſtrong vinegar; weak wine weak vinegar: but wine deprived of its ſpirit, and quite vapid, will never be vinegar; neither can vinegar be made without fermentation. " Acetum eſt ſal volatilis oleoſus acidus, admodum utilis; quoniam " putredini, humoribus animalium adeo communi, adeo periculoſæ, adverſus; " interim

" interim oleoſi adunati mitificatione minus acris habetur. Simul adeo pene-
" trabilis liquor hic eſt, ut, ſine partium ſeceſſu diverſarum, per denſiſſima
" ſola (cola?) tranſeat quam expeditiſſime, viribus intactis; imo & totum fere
" per corpus humanum, pauciſſima forte vaſcula exceperis libere meabilis eſt,
" indeque in plurima vaſa poterit diſtribui, ibidemque exercere vires quas
" poſſidet proprias, imprimis excitatas vitali motu, & calore naturali. Quin
" & permiſceri ſe patitur facile cum omni genere humorum corporis noſtri noto,
" ne olea quidem exceperis; hac igitur tenuitate, & permiſcibilitate ſua, in
" corpore noſtro plurima perficit. Refrigerandi vim habet eximiam, quoties
" febris oritur ſtimulo acrioris bilis, alcalaſcentis ſalis, aut putridi nati in cor-
" pore humano, & a morſu venenato ferarum, ſitim & hinc oriundam ſimul
" ſedans. . . . Morſui curando virulentorum aliud non eſt poſca efficacius, exi-
" mio in rabie canina exemplo. Ebrietati adeo quidem adverſa, ut cum
" ſpiritus vini fermentatitius unicum fere ſit, temulentiam quod concitat,
" aceti ſpiritus eandem jam citam domet. Imo vero ſomno & vino ſepultus
" ex abuſu ſpirituum, ingeſto excitatur aceto. Hinc nervis ipſis erigendis,
" movendiſque ſpiritibus, vix aliud aptius. Debilibus, languentibus, lethar-
" gicis, ſoporoſis, ſyncopticis, vomiturientibus, incaſſum ſæpe occurrere co-
" natus per artificioſiſſima chemiæ producta, ſummum tandem in aceto, nari-
" bus orique adhibito, vel in ventriculum ingeſto, auxilium impetravi. Quin
" etiam, quod ſoli credent experti, convulſis, hypochondriacis, hyſtericis pro-
" deſſe ſæpius memini. Jure ideo Hippocrates & Galenus & ſplenicis lauda-
" bant. Ad putredinem veram humorum, corruptionem mortiferam, gan-
" grenoſos reptatus, adeo prodeſt, ut nihil habeat ſimile: quod expertus palam
" eloquor. . . . Sed & attenuandi virtutem quoque, pace aliter ſentientium,
" aceti virtutibus accenſeo: ſi enim tepefactum cruori immiſcetur, ejuſdemve
" ſero, diluit illa, non cogit, nec generat hac admiſtione polypos, ſed ſuaviter
" reſolvit coagulata. In acutis ideo febribus, in ardentium febrium immani-
" tate, in peſte, variolis, morbillis, ſimilibuſque malis, ubi fida anatome to-
" ties cogulata reperit, acetum remedium ſummum, &c." *Boerh. Chem.* ii. 212.
Who after the diſtillation of vinegar, ſays, " Ex quibus patet acetum differre
" tota natura ab acidis quibuſcunque notis." p. 217. And certainly it is
vaſtly ſafer than any mineral acid.

PIPER.

SECT. I.

1. Piper nigrum, *offic.* Piper rotundum nigrum, *B. P.* 411. *R. H.* 1341. Piper nigrum. *J. B.* ii. 181. *Ger.* 1558. *Park.* 1603. " Molago-codi. *H. Mal.* vii. 25. t. 12. Piper nigrum, *offic.*" *Dale* 330. Round Black Pepper, *vulgo* Black Spice.—It grows in Malacca, Java, Sumatra, &c. in the Eaſt-Indies; and, being a ſcandent plant, is ſet at the root of the areca, coco, and other trees, to climb upon them. The fruit grows in cluſters, is firſt green, then red, and when dried in the ſun black, ſuch as we have it. Vid. *Lin. Gen. Pl.* p. 17.

2. Piper

2. Piper album. *offic.* Piper rotundum album. *B. P.* 412. *R. H.* 1342. Piper album. *J. B.* ii. 184. *Ger.* 1538. *Park.* 1603. "Piper album, *offic.* P. album leucopiper. *Mont. Exot.* 9." *Dale* 331. White Pepper.—This appears to be nothing but the Black Pepper decorticated; and hence is ſmooth, not wrinkled, and of a whitiſh colour, as brought to us. Yet, probably, there is a native White Pepper alſo. "Inter plantam quæ Piper nigrum fert, & eam "quæ candidum, tam exigua eſt differentia, ut a ſolis incolis diſcerni poſſint. "... Candidi plantæ rariores ſunt, nec niſi certis Malabar & Malaccæ locis "raræ naſcuntur. Solet magnatum menſis inferri: eo enim utuntur, quem-"admodum nos ſale." *Garcias Cluſ. Exot.* 182. "Ex Batavorum experientia "cognoſcitur, in ipſa planta album reddi, quod integræ uvæ Piperis albi, "omnibus ſuis granis onuſtæ, ad nos adferantur." *Bod. in Theoph.* p. 1183. Although many authors are of a different opinion. Vid. *R. H.* 1342. *Miller's Bot.* 348. *Savary's Dict.* ii. 1156. "Black Pepper is the only ſpice we import "directly from the Eaſt-Indies, all the others coming through the hands of the "Dutch." *Lewis's Pharm.* p. 53.

3. Piper longum. *offic.* Piper longum orientale. *B. P.* 412. *H. Ox.* iii. 602. Piper longum. *J. B.* ii. 185. *Ger.* 1539. *Park.* 1604. *R. H.* 1343. "Piper "longum *offic.* Catta-tripali. *H. Mal.* vii. 27. l. 14." *Dale* 286. Long Pepper.—This is cylindrical, about the thickneſs of a gooſe-quill, and an inch and half long, reſembling ſomewhat the catkins of Haſel; of a greyiſh colour on the outſide, whitiſh within; of an hot biting aromatic taſte, and ſpicy ſmell. Vid. *Geoff.* ii. 380. It grows in Java, Malabar, Bengal, &c. on a climbing monopetalous plant. Several fruits like it are brought from America; but the oriental is the true Long-Pepper. Vid. *Savary's Dict.* ii. 1158.

Hippocrates mentions an "ἰνδικον ὁ καλεεσιν οἱ περσαι πεπερι." *De Morb. Mul.* l. 2. *Ed. Foeſ.* 672. lin. 14. And the "κοκκοι ἰνδικε φαρμακε τε των ὀφθαλμων ὁ καλειται πεπερι." *De Morb. Mul.* l. 1. p. 630. l. 38. "Peperi fructus eſt; "ejus genera duo. Unum rotundum, orobi modo, tegumine carneque con-"ſtans, ſicut laurina bacca nigrum. Alterum oblongum, ſubruffum, ſemina "papaveris continens. Longe hoc validius altero. Ambo autem vim cale-"factoriam obtinent. Quamobrem contra cicutam auxiliantur." *Theophr.* l. 9. c. 22. p. 1178. Yet *Dioſcorides*, l. 2. c. 189. p. 154. *Plin.* l. 12. c. 7. p. 303. *Galen Simpl.* l. 8. fol. 58. B. all believed the Piper longum, album, & nigrum, to be the fruit of one and the ſame tree, and to differ only in age, or ripening; the germinating cluſter, unopened, being the long; and when opened, and near ripe, the white; which, being come to perfect maturity; became the black Pepper, which they moſt eſteemed. "Mirum videri poteſt poſteriores Græ-"cos id de hac planta & ſemine ignoraſſe, quod non neſcivit antiquiſſimus "Theophraſtus. Sed Theophraſtus temporibus vixit Alexandri Magni, qui "Indos ſubegit. Potuerunt itaque melius Græci antiquiores naturam Piperis "explorare, quod recentioribus non licuit." *Bod. in Theophr.* p. 1183. Garcias ſays the Long Pepper is called in Bengala *Pimpilim.* Vid. *Cluſ. Exot.* 182. where there is Piperis albi uva ad vivum expreſſa, which came home amongſt ſome zingiber conditum. — 4. Piper Jamaicenſe. *offic.* Piper odoratum Jamaicenſe noſtratibus. *R. H.* 1507. Myrtus arborea aromatica foliis laurinis, *Sloan. Cat.* 161. Hiſt. 276. t. 171. *Phil. Tranſ.* N°. 192. p. 462. *Raii Dendr.* 33. An cocculi Indi aromatici. *Grew. Rar. R. S.* 211? Pimenta. *offic.* Caryophil-

lus

" lus aromaticus Americanus, lauri acuminatis foliis, fructu orbiculari. " *Pluken. Alm.* 88. *Phytog.* 155." *Dale* 296. Jamaica Pepper, or All-Spice. —" It is a round umbilicated fruit, about as big as a juniper berry, of a " tough conſiſtence, and brown colour, containing two dark-brown ſeeds, " of a pleaſant aromatic ſmell and taſte, between thoſe of a clove and a nut- " meg. It grows in great plenty in Jamaica." *Miller's Bot.* 349. " Odore " & ſapore aromatico, ad caryophyllos accedente." *Dale* 296. " Pimenta is " of a fragant aromatic ſmell, reſembling a mixture of cinnamon, cloves, and " nutmegs." *Lewis's Pharm.* p. 54. " Sapore acriuſculo, aromatico, ad cary- " ophyllos accedente." *Geoff.* ii. 386. è *R.H.* " A ſapore grato plurium ſpe- " cierum ſimul, omnia aromata apud Anglos dicitur; caryophylli enim aro- " matici, cinnamomi, & piperis ſaporem, ſed mitiorem refert." *Geoff.* ii. 388.

SECT. II.

The firſt three are extremely hot and biting, like ginger and cloves; the fourth is milder, partaking ſomewhat of the nature of nutmegs.—All are ſtrongly ſtimulating aromatics, and carminatives; called ſtomachic; and commended internally in flatulent and phlegmatic diſtempers, in palſies, colics, agues, &c. and externally as an apophlegmatiſm, errhine, ſinapiſm, &c.

" Calfaciunt & ſiccant 3. incidunt, attenuant, aperiunt, reſolvunt. *Uſus* " præcip. in frigiditate & cruditate ventriculi, colicis doloribus (præſtat album) " in viſus imbecillitate, (quia flatus diſcutit.)—Piper extrinſecus in apophleg- " matiſmis, gargariſmis, ſternutatoriis, ſedat odontalgiam, columellam tu- " midam imminuit, nervorum affectus frigidos juvat. N. 1. Vis Piperis vola- " tilis valde eſt. Vitentur ergo præparationes in quibus volatile evaneſcit, " e. g. Extractorum Præparationes. N. 2. Vulgus Piper longum in paroxyſ- " mis febrium exhibere ſolet, id quod non niſi in principio locum habere po- " teſt. *Præp.* 1. Species diatrion Pipereon. 2. Tragea, ſeu ſpecies fortes. " 3. Ol. Piperinum ſtillat. ex nigro. (N. Piper ℔j. dat olei ℈j. circiter). Pa- " roxyſmum tertianæ præcavet, ſi hor. 2. ante eum exhibeatur, purgato ta- " men corpore. Extrinſecus admiſcetur inunctionibus dorſi in febribus. " Doſis gr. ii. iii. iv. &c. 4. Oleum de piperibus. *Schrod.* 649.

1. They are exceſſively hot, and cauſe a pretty laſting and uneaſy glowing in the mouth; the black is the ſtrongeſt, yet more uſed at the table than any other, I may ſay than all the other ſpices; and next to it the Jamaica pepper, which is the mildeſt. " Sapore fervido totum os & fauces adurens. Longum " guſtu non cedit nigro vel albo, quanquam non ſtatim apparente." *J. B.* Hence they are commonly ordered to be ſwallowed whole: and becauſe their heat is not thus ſo ſenſibly felt, ſome have imagined they rather cooled. Vid. *Hoffman.* p. 424. § 3 & 4. — 2. Although Pepper yields very little eſſential oil, yet it keeps well, and is not eaſily nor ſoon diveſted of its acrimony: yet to make an extract of it would be fooliſh.—3 Externally they heat, inflame, ulcerate, like pyrethrum: ſo are of uſe in lethargies, palſies, fixed pains, &c. —4. " Analyſi chymica ex Piperis nigri ℔iv. prodierunt liquorum ℔j. ℥ix. ʒj. gr. vj; ſalis vol. urinoſi ʒj; olei ℥viij. ʒß; carbonis ℔j ℥ij. ʒvj. gr. xviij. unde cinerum ℥iij. ʒvj. gr. xxiv. ac inde ſalis fixi alcali ℥j. ʒiij gr. xii. (ergo terræ

℥ij.

℥ij. ʒiij. gr. xij.) & jactura fuit ℔j. ℥iv. gr. xlviij." ſecundum *Geoff.* ii. 381. But here the ſum produced and the loſs is ℔iv. ℥viij. ʒiß. ſo that there are ℥viij. ʒiß. too much. He alſo makes ℥xiv. ʒvi. gr. xviij. conſumed in calcination; but there is ʒj. and gr. xlviij. more: ſo that there are in all ℥xiv. ʒvij. gr. lxvi. Here then are two palpable errors. Beſides the quantity of oil, fixed ſalt, earth, and eſpecially the loſs, are extraordinary. " Verum Piperis " nigri ℔vj. in aqua communi per ſex dies maceratæ & poſtea deſtillatæ, " præbuerunt olei eſſentialis, Piperis odorem ſpirantis, ſaporis acris, ſed non " admodum intenſi ʒiij. Aqua cui innatabat oleum, Piperis odore perfuſa " erat, et acri ſapore imbuta, et ſublimati corroſivi ſolutionem turbidam et " lacteſcentem efficiebat: grana vero macerata multum de ſuo ſapore perdide- " runt." *Geoff.* ii. 381. " Geoffroy relates thirty-ſix (it is an error for thirty- " two) ounces of well choſen black pepper, being macerated in water for ſix " days, and afterwards diſtilled, yielded ʒj. of an aromatic oil. . . . Spirit of " wine ſeems entirely to extract all the pungency and heat of this ſpice; ſo " that a few drops of a tincture made with it (which is of a dark brown colour) " ſets the mouth, as it were, in a flame. *Lewis's Pharm.* p. 53. " Pimenta, " per veſicam deſtillata oleum eſſentiale odore gratum reddit, quod in aqua " fundum petit." *Geoff.* ii. 1388.——

SECT. III.

Either of theſe ſorts may be given in ſubſtance to gr. v. or vi; in infuſion to gr. x. or xii. The black pepper is uſed in the pulvis antilyſſus, theriaca Andromachi, (ergo et aq. theriacalis) et emplaſtrum epiſpaſticum: Piper album in the mithridatium et theriaca: and the Piper longum in the tinctura ſalutifera, mithridatium et theriaca. There is an aqua Piperis Jamaicenſis in the *New London Diſpenſatory.* " Piperis doſis in ſubſtantia a gr. i. ad x; infuſi " ad ℈j." *Geoff.* ii. 384.——

LECTURE LXVII.

PISTACIA.

SECT. I.

PISTACIA, Nux Piſtacia. *offic.* Piſtacia peregrina fructu racemoſo, ſive terebinthus Indica Theophraſti. *B. P.* 401. Piſtacia. *Dod.* 817. *J. B.* i. 275. *Ger.* 1436. *R. H.* 1682. Nux Piſtacia. *Park.* 1416. Terebinthus India Theophraſti, eſt Piſtachia Dioſcoridis. *Lob. Adv.* 413. Terebinthus Indica Theophraſti, Piſtachia Dioſcoridis. *Lob. Adv.* 413. *T.* 580. *J. B.* ii. 173. In *H. Ciff.* non invenio. The Piſtachio or Piſtick-nut Tree.

The fruit of this tree is about the ſize of ſmall hazel nuts, covered with a thin wrinkled ſkin, green on one ſide and red on the other, under which is a white, thin, tough ſhell, containing, in a reddiſh membrane, a green oily ker-

nel, of a very pleaſant ſweet taſte.—It grows in Syria, Perſia, Africa, &c. The kernel is uſed, and more at the tables of the rich than in the ſhops. " Fructus dicuntur πιστακια; Nicandro φιστακια; Poſſidonio, monente Athe-" næo, βιστακια: Latinis Piſtacia: Officinis & Barbaris Fiſtici." *B. P.* According to Athenæus, the name is Syriac originally. Vid. *Bod. in Theoph.* p. 359. It was firſt brought into Italy by L. Vitellius in the reign of Tiberius. Vid. *Plin.* l. 15. c. 19. p. 368. and l. 15. c. 22. p. 369. *Dioſcor.* l. 1. c. 177. p. 83. compares them only to the pine-nuts; but *Theophraſtus*, l. 4. c. 5. p. 347. deſcribes ſufficiently the Terebinthus Indica, to ſhew that it is our Piſtacia. The tree is Piſtacia, æ; the fruit Piſtacium, properly. They come from Turky.

SECT. II.

They are antacrid and nouriſhing, like ſweet almonds; called pectoral and reſtorative; and commended in coughs, conſumptions, frigidity, &c.

" Calfaciunt 2. ſiccant 1. attenuant, aperiunt. *Uſus* præcipui in mucila-" gine pulmonum, obſtructione epatis; roborant ſtomachum; arcent nauſeam " ac vomitum; excitant appetitum; bonum ſuppeditant nutrimentum. *Præp.* " Oleum, exprimitur ex nucleis." *Schrod.* p. 650. Piſtacia, quæ quidem in " Syria gignuntur, pineis nucibus ſimilia, ſtomacho amica ſunt. Sive porro " edantur, ſive trita ex vino bibantur, contra ſerpentium morſus auxiliantur." *Dioſcor.* l. 1. c. 177.

The outer ſkin ſmells of turpentine, as the tree is ſaid by inciſion to yield a juice like it. Vid. *Savary's Dict.* iii. 2, 413. The kernels are oily and farinaceous, and might be uſed in emulſion (as Mr. *Geoff.* ii. 418. ſays they are preſcribed) were it not for their colour. " Apprime nutrire & Venerem ſti-" mulare recentiores plerique volunt. Quibus de cauſis bellariis inſtauranti-" bus & reficientibus admiſcentur, ab Hiſpanis, Italis, Gallis, ut vix ullum " ſit analepticum ſine Piſtacio. C. Hoffmannus e contra fidenter affirmat fal-ſam eſſe opinionem de πολυτροφια, quinimo æſtuoſa eſſe ait, in calidioribus, " non minus quam amygdalas. At Venerem augent, & maximus eorum " uſus eſt in Italia, teſte Braſavolo. Quicquid faciunt, flatuando faciunt, ob " excrementitiam humiditatem. Hactenus Hoffman: cui oppono quotidia-" nam experientiam, &c." Vid. *R. H.* and *Hoffman.* p. 401.

PRUNA.

SECT. I.

Prunus, Prunus ſativa. *offic.* Prunus. *B. P.* 443. *Dod.* 804. *J. B.* i. 184. *Park.* 1512. Pruna domeſtica. *Lob.* 595. *Ger.* 1497. Pruna ſativa, *R. H.* 1526. Prunus inermis, foliis lanceolato-ovatis. *H. Cliff.* 186. The Plum-tree.—But there being a great variety of the fruit of this tree (coluntur ſpecies 31. *Lugd. B.* ii. 241.) there may be many ſorts of dried Prunes. There are in our Diſpenſatory only two, *viz.*

1. Pruna

1. Pruna Damaſcena, *off.* which are the dried fruit (according to *Dale* 304.) of the Prunus fructu magno, dulci atro-cœruleo. *T.* 622. Pruna magna dulcia, atro-cœrulea. *B. P.* 443. The Damaſk Prunes *or* Plums; though they are never brought from Damaſcus, but from France, if we have any of them.

2. Pruna Gallica. *off.* Pruna parva dulcia atro-cœrulea. *B. P.* 443. Prunus fructu parvo dulci atro-cœruleo. *T.* 622. Common *or* French Prunes.—"Hæc nucleum parvum, non multo ceraſo majorem habent, & a noſtris "Damaſcenula vocantur. Pruna Damaſcena noſtratia, Bellon." *B. P.* Are theſe the Pruna Gallica *Pb. Londinenſis?* "Palma datur Damaſcenis, ſed in "officinis noſtris raro inveniuntur; eorum autem loco Gallica uſurpantur." *Dale* 304. "The beſt Plums or Prunes being formerly brought from Da-"maſcus, the fruit has kept that name, though it is ſeldom or never brought "from thence now, we making uſe of the Pruna Gallica. *offic.* which I take "to be the fruit of the Prunus Damaſcena, *Ger.*" *Miller's Bot.* 359. Vid. *R. H.* 1526; where he ſays the Pruna Damaſcena of the ſhops are much the ſame with the Pruna Damaſcena *J. B.* which are not different from the Pruna parva dulcia atro-cœrulea *B. P.* except that they are valde acida. But there are dried in France ſeveral ſorts of Prunes: for which ſee *Savary's Dict.* ii. 1238.—There are ſometimes brought alſo from France,

3. Pruna Brignolenſia, *off.* Pruna ex flavo rufeſcentia, mixti ſaporis, gratiſſima. *B. P.* 443. Prunus Brignonienſis fructu ſuaviſſimo. *T.* 623. Prunellos, Pruna Briolenſia aut Brignolenſia. *R. H.* 1526. They are ſo called from *Brignols*, a town of *Provence*. "*Uſu:* fructus ſeu Pruna colore ex flavo "rufeſcentia, enucleata, & exſiccata, ſapore ſuaviſſima." *Dale* 304. Vid. *R. H.* "l. c. They are uſed as a ſweet-meat. "They are ſeldom preſcribed by "phyſicians; but being of a pleaſant grateful taſte, and not apt to purge, "they are frequently eaten by perſons in fevers." *Miller's Bot.* 360.

Prunus arbor, *Gr.* κοκκυμηλεα: fructus, Pruna κοκκυμηλα. Vid. *Dioſcorides*, l. i. c. 174. p. 82. vel infra.

SECT. II.

They are antiſeptic and gently purgative, (perhaps alſo ſubaſtringent); and commended in ardent and putrid fevers, and wherever heat, thirſt, or bilious acrimony offend; much uſed in purgative decoctions, laxative ptiſans, and electuaries, &c. They may be given to ounces: and are in the electuarium lenitivum.

"Pruna naturâ refrigerant & humectant. Recentia cruda emolliunt alvum "quidem, verum facile putreſcunt, & proin minus commode (imprimis poſt "cibum) eſitantur, maxime ſi immoderatior uſus ſit. Pruna Damaſcena eſui "aptiora ſunt, laxant, acrimoniam humorum obtundunt, linguam (macerata "ac frigida in ore retenta) humectant, ſitim extinguunt. Pruneola, (*ſeu* Pru-"nella dicta) refrigerant magis quam reliqua, humectantque ſed citra alvi "commotionem, adeoque eſui aptiora cenſentur, gratumque refrigerium in "febribus exhibent. *Præp.* 1. Condita Pruna. 2. Pulpa Prunorum. 3. E-"lectuarium diaprunis ſimpl. 4. Diaprunum compoſitum. 5. Diaprunum "non laxativum." *Schrod.* 656.

For they are of a ſubacid pleaſant ſweet taſte, but little ſmell. Unripe plums are ſour and ſtyptic; the ripe more ſweet, and ſtill more ſo when dried; when they are leſs apt to cauſe diarrhœas. " Prunus nota arbor eſt, " cujus fructus eſculentus eſt, ſed ſtomachum male habet, alvumque mollit. " At Syriacarum & earum maxime quæ Damaſci naſcuntur fructus exiccatus " ſtomacho utilis eſt, alvumque aſtringit." *Dioſcor.* l. c. " Pruni ſativæ " fructus ventrem ſubducit, recens plus, aridus minus. Pruna Damaſcena " etiam ventrem ſubducunt, minus tamen quam quæ importantur ex Iberia," *Galen Simpl.* l. 7. p. 51. H.

SEBESTENA.

SECT. I.

Sebeſtena, Myxa, Myxaria. *off.* Sebeſtena domeſtica; an ἀμαμαξις Athenæo? *B. P.* 446. Myxa domeſtica, ſive Sebeſten. *J. B.* i. 197. Myxa. *Dod.* 806. Sebeſtena, Myxa, ſive Myxaria. *Ger.* 1499. Myxos, ſive Sebeſten. *Park.* 252. Myxa, ſive Sebeſten. *J. B. R. H.* 1563. Myxa. *Dod. B. J.* ii. 246. " Sebeſten. *offic.* Prunus Malabarica fructu racemoſo, calyce excepto. " *R. H.* 1563. Vidimaram. *H. Mal.* iv. 77. t. 37." *Dale* 297. Vid. *H. Eltham.* p. 340. t. 255. The Sebeſten, or Aſſyrian Plum-tree.—It grows in Egypt, Syria, &c. The fruit only is uſed; and that but ſeldom. It is a ſmall wrinkled plum, of a blackiſh colour; containing in a ſweet viſcous pulp a triangular ſtone. " It is the fruit of a tree like a plum-tree, that grows in " Egypt and Aſſyria, from whence they uſed formerly to be brought for our " uſe; but for theſe many years they have been quite ſtrangers to our ſhops." *Miller's Bot.* 405. " Item Pruna in Damaſco monte nata, & Myxa; utrum- " que jam familiare Italiæ: ex Myxis in Ægypto & vina fiunt." *Plin.* l. 13. c. 5. p. 322. " Simul dici poſſunt populares eorum Myxæ, quæ & ipſæ " nunc cœpere Romæ naſci inſitæ ſorbis." *Plin.* l. 15. c. 13. p. 362. " My- " xa fructus arboris eſt primo (pruno) quidem minor facultate tamen perſimi- " lis." *Paulus*, l. 17. p. 634. " Prunus Sebeſten a Dioſcoride & Galeno præ- " teritur. At Ægineta, Ætius, & Actuarius frequenter meminere. Dicitur " μυξος, fructus vero μυξαι, μυξα, μυξαρια, a pomi mucoſo lentore. Græci " enim mucum μυξαν vocant. Arabibus & officinis Sebeſten." *B. P. Myrepſus* writes it συμπεστενε. *Antidot.* ſect. 1. c. 99. p. 383. " Sebeſten Arabi- " bus dicta eſt, vel ασεβαστος Auguſtus; vel a Sebaſta, Samariæ metropoli, " ubi olim creſcebat." *R. H.* 1563.

SECT. II.

They are antacrid and incraſſating; called pectoral; and commended internally in coughs, heat of urine, &c. and externally as emollient and anodyne. They are more viſcous than jujubes; but may be uſed the ſame way.

" Sebeſten inter caliditatem & frigiditatem temperata ſunt; humectant, e- " molliunt, acrimoniam humorum obtundunt. *Uſus* præcip. in catarrhis acri- " bus,

" bus, urina acri, febribus biliosis, alvi obstructione. Summatim, ut figura, " ita & viribus Pruna Damascena æmulantur. *Præp.* Electuarium de Sebe- " sten. Purgat leniter, obtunditque acrimoniam humorum. Dosis ab ʒß ad " ʒij." *Schrod.* 680.

1. They are very sweet, and so viscous that good birdlime is made of them in Egypt, as Alpinus and others write. Hence they are very different from prunes, figs, dates, yea and jujubes too; and are much more antacrid, and also incrassating. With this viscum they pretend in Egypt to discuss even scirrhi: there it is also taken with pulvis glycyrrhizæ and sugar, for coughs. — 2. The pulp is commended also in asthmas, hoarseness, pleurisy, peripneumony, bilious fevers, costiveness, &c. Vid. *R. H.* 1556. " Eorum pulpa ʒx. " pondere devorata, aut ad summum xii. eosdem fere præbet effectus quos " Ægyptia Siliqua, Cassia vocata." *Matthiol.* p. 218. *Vix credo.*

" Analysi chymica ex pulpæ Sebesten cum corticibus membranosis ℔iij. " ʒxiv. per B. V. distillatæ sunt humorum ʒxxiiiß. ʒß. Jactura fuit ʒij. ʒiiiß. " & massa residua ℔ij. ʒvij. (sum ℔iij. ʒix. ʒvij. so that ʒiv. ʒj. were defici- " ent) quæ per retortam distillata præbuit liquoris ʒxiv. ʒvij. gr. xviij; olei " ʒij. ʒvj. gr. xviii; carbonis ʒxiij. ʒij, unde cinerum ʒij. ʒvij. & inde salis " alcali acerrimi ʒj. ʒvj. (ergo terræ ʒix.) ac jactura fuit ʒj. ʒvij. (sum ℔ij. " ʒvij. gr. iv. gr. iv. too much.) " Ex hac analysi liquet Sebesten componi " ex partibus oleosis, salino-acidis, & terrestribus, inter se adeo intime con- " junctis, ut exinde mistum dulce & glutinosum exurgat (*i. e.* that it is a ve- " getable, sweet and glutinous) magis lentum esse tenax quam jujubæ, ob " majorem olei quantitatem: (compare the analysis althææ & symphiti:) " majorem quoque salis alcali, tum volatilis, tum fixi copiam præbet; & ab " his salibus pendet vis attenuandi & resolvendi, qua Sebesten donantur." Thus *Geoff.* ii. 313. who is right enough as to the virtues. But they incrassate.

SILIQUA.

SECT. I.

Siliqua, Siliqua dulcis, Caroba, Ceratia. *offic.* Siliqua edulis, *B. P.* 402. *T.* 578. Ceratonia. *Dod.* 787. Siliquæ arbor, sive Ceratia. *J. B.* 1, 2, 413. *R. H.* 1718. Ceratia, Siliqua, sive Ceratonia. *Ger.* 1429. Siliqua dulcis, sive vulgatior. *Park.* 236. Ceratonia. *Lin. G. Pl.* p. 475. *H. Cliff.* 75. The Carob-tree—The fruit whereof is a three or four inch long, one inch broad, and $\frac{1}{4}$ inch thick pod, of a reddish-brown colour, in proper cells within a pretty thick and solid substance; of a sweet taste, with yellowish brown seeds. The husk only is eatable.

It grows in Naples, Sicily, &c. in great plenty, and, as some say, in Palestine, particularly in the mountains about Jerusalem. " Vesslingius paucas ha- " rum arborum in Ægypto vidit, frequentiores in Palæstina, plurimas in Ju- " deæ montibus, & circa sacram ibidem urbem." *R. H.* 1718. The Germans and Dutch know no other name for it, in their language, but St. John's bread. Vid. *Dod.* 787. And it is the opinion of some commentators that the locusts, ἀκρίδες, on which the Baptist fed was a vegetable not animal food. Vide

Ham-

Hammond's Annot. on *Matth.* iii. *v.* 4. " Siliquæ olim viliſſimorum hominum " cibus erat & ſuum, ut patet ex ſimilitudine filii prodigi." *Luc.* xv. *v.* 16. (where the huſks, on which the ſwine fed, are called in the original κεράτια.) *Hoffman.* p. 446.

" Κεράτια. *i. e.* Siliqua, a corniculorum ſimilitudine, a Dioſcoride, l. 1. c. 158. " qui eam non deſcripſit: a Galeno & Ægineta vero, κερατωνια, quaſi cor- " nuta ſiliqua, hæc arbor appellatur: a recentioribus Græcis Xylocerata: Ara- " bibus Charnub: a Plinio, l. 15. c. 24. Siliqua (quia ſemen fert in ſiliqua " leguminum modo), de qua hæc; haud procul abeſſe videntur & prædulces " ſiliquæ, niſi quod cortex in iis manditur: digitorum hominis longitudo illis, " interim falcatis, pollicari latitudine, &c." *B. P.* 402. In Egypt it is called Carub, or Canub. Vid. *Alpin. de Pl. Æg.* cap. 3. p. 8.

SECT. II.

It is antacrid and purgative; called pectoral and aſtringent; and commended for coughs, heartburn, heat of urine, &c. but never uſed here. Cum caſſia convenit.—" *Officin.* Fructus (ſcil. ſiliquæ) cujus ſuccus melligenus in uſum " ſolum venit. *Vires.* ſiccat & aſtringit. *Uſus* præcip. in ardore ſtomachi, " tuſſi, &c. alias concoctu eſt difficilis." *Schrod.* 684.

It is a ſweet and eatable huſk. " Callus dulcis & edulis eſt." *J. B.* In Egypt they extract from it a mel dulciſſimum, with which they not only preſerve ſeveral ſorts of fruits, but which they alſo uſe much in clyſters: " Aliqui " etiam per os ſumendum concedunt ad ſubducendam alvum: ipſo etenim al- " vus, non minus quam pulpa caſſiæ ibi ad excretionem movetur." Moreover they uſe it (as alſo a decoction of the ſiliquæ) for inflammations of the kidneys, coughs, aſthmas; " valdeque ipſos juvat." Vid. *Alpin.* l. c. Dioſcorides, l. 1. c. 158. p. 79. ſays, " Siliquæ recentes (χλωρα) alvum ſolvunt; " ſiccatæ ſiſtunt." Alſo *Galen Simpl.* l. 7. p. 51. ſays, " Ceratonia humida " ventrem ſubducunt, ſicca ſiſtunt." And this has been the generally received opinion: but Mr. Ray found it otherwiſe by his own experience. " Quam- " vis omnes qui de his fructibus ſcripſerunt, ſiccatos alvum ſiſtere affirment, " nobis tamen contrarium evenit: ſiquidem quotquot Venetiis de iis comedi- " mus, non ſolum nauſeam moverunt, ſed & alvum ſubduxerunt, non ſecus " ac pulpa caſſiæ, ita ut ventriculus poſtea ab iis abhorreret." *R. H.* 1718.

TAMARINDI.

SECT. I.

Tamarindus. *offic.* Siliqua Arabica, quæ Tamarindus. *B. P.* 403. Tamarindus. *R. H.* 1748. *T.* 660. *Ger.* 607. *Park.* 217. Tamarindi. *J. B.* 1, 2, 422. *Marcq. Braſil.* 107. Tamarindus Derelſide vocata, *Alpin. Æg.* 35. Bulam-pulli, ſive Maderam-pulli. *H. Mal.* i. 39. t. 23. *Lin. G. Pl.* p. 20. *H. Cliff.* 18. The Tamarind-tree.

It

It grows in Arabia, Africa, both the Indies, &c. The pulp of the fruit only is uſed; which, as it is brought to us, is ſoft, of a browniſh black colour, and very acid taſte, intermixed with ſtringy fibres, membranes, and large ſeeds. It is a beautiful tall tree, eaſily raiſed on a hot bed, but difficultly preſerved through the winter. Vid. *R. H.* 1748. " The Tamarinds brought " from Eaſt-India are darker and dryer, but contain more pulp, being pre- " ſerved without ſugar, and fitter to be put into medicines; thoſe from the " Weſt-Indies are redder, and have leſs pulp, and are preſerved with ſugar, " and ſo pleaſanter to be eaten as they are." *Miller's Bot.* 431.

" Ab Arabibus Tamarindus nominata, quaſi dicas dactylos Indos, ſive pal- " mulas Indicas: tamar enim illis dactylum ſignificat; licet arbor palmæ " ſimilis non ſit, nec ex palmarum generibus, niſi ad fructus effigiem, quæ " dactylum, ſive digitum inflexum refert, reſpexerint." *B. P.* 403. " Ara- " bibus Tamarhendi dictum fuit, quaſi fructus Indicus: vox enim tamar late " ſumpta fructum omnem ſignificat. Male ergo a quibuſdam Arabum inter- " pretibus, palmula Indica & dactylus Indicus dicitur, cum & fructus & ar- " bor, a dactylis, & a palma arbore longe diſcrepent." *Geoff.* ii. 355. But why ſhould it be termed fructus or dactylus Indicus by the Arabs, ſince it grows in Arabia?" " Affertur non integer, ſed contuſus. . . Garzias ait ſale " condiri, Alpinus ſaccharo. Debent ſervari in vaſe ſtricti oris: quo modo " durant apud nos per triennium." *Hoffman.* p. 75.

SECT. II.

It is an acid antiſeptic, and laxative fruit; ſaid to be cholagogue; and commended in hot, putrid, and peſtilential diſeaſes, in the jaundice, ſcurvy, gonorrhœa, &c. Doſe to ʒij. in pulp. " *Officin.* Dactyli acidi (dicuntur & " ὀξυφοινικα palmulæ acidæ). *Vires.* Refrigerant & ſiccant 2. humorum acri- " moniam & fervorem reprimunt, bilem ac aduſtos humores blande ducunt, " ſiti ſucurrunt. Doſis a ʒij. ad ʒix. in decocto. (alii ʒß ad ʒj.) N. parum " nutrimenti ſubminiſtrant. *Præp.* Pulpa Tamarindorum. Doſis ad ʒj. ad " ʒij. Electuarium diaphænicum." Vid. *D. Schred.* 777.

They are of a very acid yet pleaſant taſte. " Acidi ſaporis gratiſſimi." *R. H.* " Saporis ſubacidi." *Herman. Cynoſ.* p. 353. " Pulpa acida, vinoſa, & ſub- " acris." *Geoff.* ii. 357. and are of great uſe in hot climates and ſeaſons; as the Turks, Arabs, &c. find, eſpecially when travelling through the parched deſarts: they give them alſo in ardent and putrid fevers, plague, &c. in decoction. Tamarinds alſo improve much the taſte of the more nauſeous, as well as correct the acrimony of the more rugged cathartics. " Tartarus etiam ex " horum pulpa paratur." *Herm. Cynoſ.* p. 354. ſed malè.

" Tamarindorum ſal eſſentialis a cremore tartari non differt: ſaporis enim " eſt acidi, nec niſi in aqua fervente ſolvitur. Poſt digeſtionem aliquot die- " rum, ex Tamarindis extrahitur ſpiritus aceto diſtillato non abſimilis. . . " Pulpa exhibetur a ʒij. ad ʒj. (nonne pro ʒj?) infuſa vel decocta ad ʒiij." *Geoff.* ii. 357.

Z I N G I.

S E C T. I.

Zingi, Aniſum Indicum. *offic.* Aniſum peregrinum. *B. P.* 159. Aniſum Phillipinarum inſularum. *Cluſ. H.* ii. 202. Zingi, fructus ſtellatus, ſive Aniſum Indicum. *J. B.* i. 485. *R. H.* 1835. Aniſum Indicum ſtellatum. *Ger.* 1035. Aniſum exoticum: Philippinarum inſularum. *Park.* 1569. "Aniſum "Indicum ſtellatum, Badian dictum. *offic.* Cardamomum, Siberyenſe Pata-"vinorum Paul. Amann. H. Boſian." *Geoff.* ii. 469. Fœniculum Sinenſe, *Redi's Exp. Nat.* ii. 136. Aniſum Indicum offic. *Dale* 177. Indian or Stellate Aniſe.—This is a fruit conſiſting of (ſix or) eight capſules, placed ſtarways; each of which open above, and generally contain a pretty large ſmooth ſeed, of a warm aromatic taſte and fragrant ſmell, like aniſe: they are ſometimes empty. It was brought from the Philippines by Mr. Thomas Candiſh, in his voyage round the world; and ſent by Mr. Morgan and James Garret to Cluſius (who firſt deſcribed it) a few years after. Capt. Candiſh ſet out in July 1586, and returned in September 1588. The tree is the Euonymo ad finis Philippinarum inſularum, Aniſum ſpirans, nuculas in capſulis ſtelliformiter congeſtis proferens. *Pluken. Almag.* 140? "Ex India orientali ad nos "tranſportatur." *Dale* 177. "Ex Tartaria, Sina, & Philippinis Inſulis af-"fertur." *Geoff.* ii. 470.

S E C T. II.

It has the virtues of ſweet fennel and aniſe ſeeds; but is ſomewhat more acrid: and is chiefly commended as cordial and carminative.

"Iiſdem viribus donatur ac Aniſum & Fœniculum, imo præſtantioribus. "Ventriculum roborat, flatus diſcutit, & urinas promovet. Sinenſes illud, "cum radice Ninzin aquæ calidæ infundunt, infuſionemque in modum theæ "bibunt, ad viſcera roboranda, vires labantes reſarciendas ſpirituſque recre-"andos. Plurimi cum potu theæ, coffe, &c. permiſcent ad gratiam ipſis "conciliandam. Hodie ſpiritus ardens cum hoc fructu ab Indis præparatur, "Anis, Arak, Batavis dictus & plurimi æſtimatus." *Geoff.* ii. 470. For it taſtes and ſmells like them. "Odor & ſapor Aniſi plane eſt; relinquit tamen "neſcio quid acrimoniæ in lingua commanſus." *J. B. R. H.* "Radii ſtellæ "non multum a Fœniculi dulcis ſapore abeunt, ſed ita ut minus acutus ille "ſapor ſit, & quandam Aniſi miſturam referat." *Redi*, l. c. There is nothing ſaid of its virtues in *R. H.* nor *Dale:* nor has it been received into *our* Pharmacopœia. "Contra multas infirmitates prodeſſe prædicant. Ego vero "illud Fœniculum noſtras, nec non Aniſum, Daucum, & Cuminum virtute "parum ſuperare deprehendo." *Redi*, l. c.

LEC-

On various Medicinal Seeds.

LECTURE LXVIII.

ABELMOSCH.

SECT. I.

BAMIA moſchata, Semen moſchi. *off.* Alcea Ægyptiaca villoſa. *B. P.* 317. *R. H.* 1066. Belmuſcus Ægyptiaca, Honorio Bello. *J. B.* ii. 960. Moſch, *i. e.* Bamia muſchata. *Alp. Exot.* 197. Alcea Ægyptiaca moſchata. *Park.* 301. Althæa Ægyptiaca moſchata, Abelmoſch dicta. *H. Ox.* ii. 533. Abelmoſch vulgò. *H. L.* 25. Ketmia Ægyptiaca ſemine moſchato. *T.* 100. Bamia moſchata. *offic. Dale* 192. Hibiſcus, foliis pellato-cordatis, ſeptangularibus, ſerratis, hiſpidis. *H. Cliff.* 349. Moſch ſeed, Muſk-mallows.

It grows in Egypt, Malabar, Jamaica, Braſil, &c. The ſeed only is uſed: it is ſhaped like a kidney, gray, ſtriated, of a hot bitteriſh taſte, and ſweet muſky ſmell. With it the Arabs are ſaid to adulterate Muſk.

" Ab-el-moſch, & ſimpliciter moſch, non bel-moſch, ſemen autem aſpira-
" tione adauctum. Hab-el-moſch, *i. e.* granum Moſchi ab Arabibus appel-
" latur." *R. H.*

SECT. II.

It is aromatic, and reckoned cephalic and cordial; and is uſed in ſome countries as a perfume, and to improve the flavour of coffe: but here it is not uſed at all.

" Seminis leviter exiccati pulverim coavæ admiſcent Ægyptii, ut roborandi
" capitis, ventriculi, cordiſque, majorem acquiret efficaciam. Sabetis etiam
" intemperant, ſalubri effectu, quibus ſumptuum tenuitas ambræ moſchive
" uſum denegavit." *R. H.* 1066. " It ſmells both of Muſk and of Amber-
" griſe; is much uſed in Italy as a perfume; and in France the religieuſes
" make beads of it.". Vid. *Savary's Dict.* i. 3.

AGNUS.

SECT. I.

Agnus caſtus, Vitex. *offic.* Vitex, foliis anguſtioribus, cannabis modo diſpoſitis, *B. P.* 475. *T.* 603. Vitex. *Dod.* 774. *H. Cliff.* 327. V. ſive Agnus caſtus. *Ger.* 1387. V. ſive Agnus caſtus, folio anguſto. *Park.* 143. Agnus folio non ſerrato. *J. B.* 1, 2, 205. *R. H.* 1696. The Chaſte-tree.

It grows in Naples, Sicily, &c. flowering in Auguſt. The ſeeds are round, ſmaller than pepper, of a blackiſh gray colour, in hoary calyces, of an acrid aromatic taſte, and ſtrongly fragrant ſmell, like that of ſtœchas Arabica.

" Agnos (*i. e.* caſtus) nominatur, quod in Thoſmophoriis (*i. e.* ſacris Ce-
" reris) matronæ caſtitatem cuſtodientes, eo ad ſtrata uterentur: Lygos vero
" (quaſi vimen) propter virgarum ipſius firmitatem." *Dioſcor.* l. 1. c. 135. p. 70. *Galen Simpl.* 6. p. 40. H. " Veriſimile eſt ἄγνον dici, quaſi ἀγονον,
" quod libidine adverſetur. . . Monachi quidam ſeverunt in cœnobiis ſuis, pro
" cingulo utentes. Serapio piper monachorum appellat. *Hoffman.* p. 91.

SECT. II.

It is a ſtimulating aromatic, or an attenuating diaphoretic, and diuretic; called antaphrodiſiac; and is commended internally ad caſtitatem tuendam, & impetus Venereos reprimendos; but with better reaſon in obſtructis menſibus, flatulent colics, hyſteric fits, &c. and externally as diſcutient. It may be given to ʒj.

" Semen calfacit & ſiccat inſigniter, diſcutit, menſes ciet, appetitus Vene-
" reos cohibet, ſemen imminuit. *Præp.* Trochiſci." *Schrod.* 528—It is acrid and aromatic, even when twenty years old; ſo well does it keep. " Grana
" ſaporis acris." *J. B. R. H.* " Semen ſaporis acris, ſubaſtringentis, exſic-
" cantis." *Dale* 297. & *Geoff.* iii. 44. " Odoris & ſaporis piperacei, debi-
" lioris." *Nucl. Belg.* p. 9. " They are of a hot aſtringent taſte." *Miller's Bot.* 19. Seminum thea, though it taſtes ſomewhat drying, yet does not turn black with a ſolution of vitriol: hence it appears to ſtrengthen only by ſtimulating. It is ſuch an antivenereal as ruta, or camphora, which in ſmell it ſomewhat reſembles. " Nonnullos reperiri licet, qui in Venerem, viticis uſu,
" exagitantur." *S. Paulli Q. B.* p. 189. Vid. *Dioſcorides.*

" Analyſi chymica ex Agni fructuum recentium ℔ij. prodierunt humorum
" ʒx. ʒij. gr. xviij; olei ʒiv. gr. liv; carbonis ʒix. ʒvij. unde cinerum ʒj. ʒiij,
" ac inde ſalis fixi alcali xiij. gr. xij. (ergo terræ ʒvij. gr. lx.) & jactura fuit
" ʒvij. ʒvj," ſecundum *Geoff.* iii. 45. who adds, " Per hanc analyſim liquet,
" Agni ſemina partibus tenuibus & volatilibus copioſis donari, quandoquidem
" dum diſtillantur, totius fere quarta pars in auras avolat; quam quidem
" non ſolæ alcalinæ urinoſæ particulæ, ſed etiam acidæ & oleoſæ tenues con-
" ſtituunt. . . Deinde multum olei continent, quod totius dimidium ſuperat;
" acidi ſalis portionem non mediocrem, & aliquantulum ammoniacalis ſalis,
" pauxillum vero terræ." How does it appear to have ſo much oil, or acid ſalt? Is the jactura of any thing but of air? Surely neither urinous nor acid nor oily particles can eſcape through cloſe veſſels.

ALTHÆA. *Vide* p. 361. vol. I.

AMMI.

SECT. I.

1. Ammi, Ammi vulgare. *off.* Ammi majus. *B. P.* 159. *T.* 304. Ammi vulgare. *Dod.* 301. *Ger.* 1036. *R. H.* 455. Ammi vulgatius, an Bubonium

nium Hippocratis? *Lob.* 415. Ammi vulgatius. *Park.* 912. Ammi vulgare majus; latioribus foliis, ſemine minus odorato. *J. B.* iii. 2, 27. *H. Ox.* iii. 295. Ammi annuum. M. U. 21. Ammi laciniis foliorum caulis lanceolatis. *H. Cliff.* 19. Common Biſhops-weed.

The ſeed is ſmaller than parſley ſeed, ſtriated, of a grayiſh-brown colour, of a bitteriſh hot taſte, and pretty fragrant ſmell. It grows wild in Italy, Sicily, &c. and the ſeed ripens here if early ſown. " Parkinſon affirms that " it grew wild about Greenhith in Kent, but it has been found by no body " ſince his days." *Miller's Bot.* p. 30.

2. Ammi verum. *offic.* Ammi alterum, ſemine apii. *B. P.* 159. Ammi odore origani. *J. B.* iii. 2, 25. *R. H.* 455. *H. Ox.* iii. 295. Ammi Creticum. *Ger.* 1036. *Park.* 912. True Biſhops-weed.—This ſeed is ſlenderer than the former, and more fragrant and aromatic. " Ex Alexandria Ægypti adfertur. " *Uſu.* Semina parva, ſtriata, petroſelino minora, e rufo ſpadicea, ſaporis " acris aromatici, odoris fragrantis, ad origanum accedentis. In officinis no- " ſtris raro aut nunquam inveniuntur." *Dale* 128. " This is rarely to be " met with in the ſhops, the former ſupplying its place; it uſed formerly to " be brought from Turky." *Miller's Bot.* 30.

" Ammi nonnulli Æthiopicum aliqui regium Cuminum appellant; alii alte- " rius naturæ Æthiopicum Cuminum; & alterius Ammi eſſe prodiderunt. " Vulgo notum eſt ſemen exile, multo minus Cumino, & origani ſapore." *Dioſcor.* l. 3. c. 70. p. 202. " Eſt Cumino ſimillimum quod Græci vocant " Ammi. Quidam vero Æthiopicum Cuminum id eſſe exiſtimant. Hippo- " crates regium appellat, videlicet, quia efficacius in Ægypto judicavit. Pleri- " que alterius naturæ in totum putant, quoniam ſit exilius & candidius; ſimi- " lis autem & huic uſus." *Plin.* l. 20. c. 15. p. 527.

SECT. II.

They are attenuant, diuretic, & carminative; and commended in obſtruc- tions of urine and the menſes, flatulent colics, ſterility, &c. The common agrees with ſem. apii: the true with origanum. Doſis ad ʒj. The vulgare is but a bad ſuccedaneum to the verum.

" Ammi verum calfacit & ſiccat gr. 1. tenuium partium eſt, incidit, ape- " rit, diſcutit. Hinc convenit dolori colico & uterino, in menſibus & urina " obſtructis, in inflatione ventriculi; uſuſque præcipue interni eſt, hinc & ex- " terni." *Schrod.* 531. " Miſcetur & cutim erodentibus medicamentis (ex- " δοτοις) e cantharide paratis, quo reſiſtat urinæ difficultatibus, quæ alioqui " id genus medicamentis ſupervenire ſolent, &c." *Dioſc.* l. 3. c. 70. p. 202. —1. The Ammi verum is very hot, aromatic and bitteriſh, with the flavour and ſmell of origanum. " Odore, ſi terantur folia, admodum aromatico ori- " gani ſapore non diſſimili." *J. B. R. H.* " Semina ſaporis acris, aromatici, " quaſi ex pipere & cumino compoſiti, odoris fragrantis ad origanum acce- " dentis." *Herman. Cynoſ.* p. 268. " Saporis acris, aromatici, odoris fra- " grantis ad origanum accedentis." *Dale* 128. But the Ammi vulgare is not near ſo hot or biting, being only a little bitteriſh, with the flavour of ſmallage, and not very fragrant. " Semen ignavius Cretico." *R. H.* " Saporis amari-

" cantis, acris; odoris fragrantis." *Dale* 128. " Saporis amari acris, odoris " fragrantis." *Herm. Cynoſ.* p. 268. Whence N. B. it appears that this is a bad ſubſtitute for the Verum; which—2. is much commended for barrenneſs in women. " Siquidem, ſays *Matthiolus* (p. 557.) ſi propinetur mane, ex " vino meraco, aut carnium jure (in tenuem pulv. redact.) 3j. alternis diebus, " quater vel quinquies, tribus horis ante cibum, futuram pollicetur prolem." And *S. Paulli Q. B.* p. 195. directs an uterine clyſter, and compound powder, in which the Ammi V. is an ingredient, which he recommended " multis ſte- " rilibus novis nuptis, quæ in graviditate & a fluore albo liberatæ fuere!

Sem. Ammeos is in the Theriaca: *Veri* ſhould be added in *our* Pharm. becauſe we have among the ſimples both Ammi Verum and Vulgare. The *London* M. M. has thrown out the Verum; and Mr. *Geoffroy* has forgotten them both. Is the Ammi alterum ſemine apii. *B. P.* a ſpecies Ammeos T? Neſcio. Is the ſeed of this plant certainly the Ammi Verum *off.?* I cannot ſay it is; though *Dale*, whom I have followed, makes it ſo; as does alſo the *Lond. Pharm.* edit. 1721. But the Ammi Verum, *Geſn. Hort.* is the Ammi parvum, foliis fœniculi, *B. P.* 159; fœniculum annuum origani odore. *T.* 312. (which is one of the Ammis in the *Cod. Medic.*); Ammoïdes majus, odore origani *B. J.* 49. where it is marked as an officinal plant. N. B. Ammi minus is the Ammi odore origani *J. B.* in *Herm. Cynoſ.* p. 268. The Ammi alterum ſemine apii *B. P.* is the Ammi ſemine odoratiſſimo & tenuiſſimo *J. B.* iii. 2, 25. in his *H. L.* p. 34. which is alſo *Boerh.* Ammoides, &c. and thus they differ in ſynonyma, if *Geſner*'s and *Dale*'s Ammi Verum be not the ſame.

AMOMUM.

SECT. I.

Amomum vulgare, Siſon quod amomum officinis noſtris. *B. P.* 154. Siſon, ſive officinarum Amomum. *J. B.* iii. 2, 107. *R. H.* 443. Petroſelinum Macedonicum Fuchſii. *Dod.* 697. *Ger.* 1016. Siſon. *Cæſ.* 301. *M. U.* 12. Siſon, σισων Dioſcoridis. *H. Ox.* iii. 283. Siſon vulgare, ſive Amomum Germanicum, *Park* 913. Sium aromaticum, Siſon officinarum. *T.* 308. *R. Syn.* 211. Siſon, foliis pinnatis. *H. Cliff.* 98. Baſtard Stone-Parſley. The ſeed whereof is ſmaller than ſmallage ſeed, of a grayiſh brown colour, ſtriated, of a ſubacrid aromatic taſte, and fragrant ſmell.

It grows in moiſt and miry places, and on the banks of ditches in England. *R. Syn.* " It grows in ditches and banks, and moiſt places; flowering in " ſummer; its ſeed being ripe in Auguſt." *Miller*'s *Bot.* 31. Though *Dioſcorides*'s deſcription σισωνος agrees to it well enough, yet " ſemen eſt nobis in- " cognitum," ſays *Matthiol.* p. 553. " Siſon exiguum ſemen eſt quod in " Syria naſcitur apio ſimile, oblongum, nigrum, & ferventis guſtus. Bibi- " tur contra lienis vitia, & dyſuriam, & commorantes menſes. . . In cacumi- " nibus autem ceu granula multa gerit." *Dioſcor.* l. 3. c. 64. p. 200. ſo that this cannot be the Amomum. I find it not in Hippocrates nor Theophraſtus, but in Galen.

SECT.

SECT. II.

It is a warm aromatic, carminative, and diuretic; and may be better ſubſtituted in place of Ammi verum than the Ammi vulgare, being but a bad ſuccedaneum for the Amomum racemoſum.

" Officinæ duplex ſemen ſub Amomi nomine monſtrant, quorum alterum " majus nigrum, rotundumque eſt inſtar granorum piperis rotundi, vel cube- " barum, guſtu minime acre, quod videtur veterum eſſe Siſon, Sinon, &c. " Alterum minutum ſemen & pallidum; utrumque raro in uſum venit, loco- " que Amomi veterum recipitur Acorus." *Schrod.* p. 531. " Diuretica & " lithontriptica eſt." *Dale* 124.

It is remarkably aromatic; and one of the leſſer hot ſeeds, as they are called. " Ammeos, Amomi, daucique apiique minora." *Marg.* " Guſtu acriuſculo " aromatico." *R. H.* " The ſeed is about the bigneſs of parſley ſeed, of a " hot ſpicy ſmell and taſte, ſomething like a nutmeg." *Miller's Bot.* 31. " Amomi ſemen (eſt) Amomi racemoſi *B. P.* vel Sinonis, quod Amomum " officinis noſtris." *B. P.*

ANETHUM. *Vide* p. 83. *ſupra.*
ANGELICA. *Vide* p. 365. vol. I.

ANISUM.

SECT. I.

Aniſum. *offic.* Aniſum herbariis. *B. P.* 159. Aniſum. *J. B.* iii. 2, 92. *Ger.* 1035. *Park.* 911. *R. H.* 450. Aniſum vulgatius, minus, annuum. *H. Ox.* iii. 297. Aniſum foliis radicalibus. *H. Cliff.* 107. Apium, Aniſum dictum, ſemine ſuaveolente (majore & minore) *T.* 305. Common Aniſe.—The ſeed is ſmall, roundiſh, ſtriated, of a greeniſh colour, of a warm aromatic ſweet taſte, and pleaſant ſmell.

It grows in Syria, Egypt, &c. and is cultivated in France, Spain, Malta, &c. " It is cultivated in Germany; but the beſt ſeed, which is a ſmaller ſort, " comes from Spain." *Miller's Bot.* 41. The Malteſe and Alicant Aniſe is " moſt eſteemed, though not ſo green as the French." *Savary's Dict.* i. 106. I have had ripe ſeeds often here; and from the ſame parcel of ſeed once four ſucceſſive years: ſo well does it keep. vid. *Miller's Dict.* vol. 1. *Art. Apium.* It is not deſcribed by Dioſcorides, l. 3. c. 65. p. 200. " Aniſum vulgaris " omnibus fere notitiæ planta eſt; ſeritur enim in campis, hortis, & viridariis." *Matth.* 553.

SECT. II.

It agrees with fœniculum dulce in virtues; is called pectoral and ſtomachic; and chiefly uſed for flatulencies, and as a corrector of purgatives.

" Calfacit,

" Calfacit, ſiccat 3. recens mitius eſt, attenuat, diſcutit, diureticum eſt, " lac urget, pulmonicum ac ſtomachicum imprimis audit. Hinc uſus præ- " cipui in inflatione ventriculi, tuſſi, &c. Infantibus ℈j. exhibitum, blande " per inferiora ac ſuperiora, ſaburram ventriculi inteſtinorumque ejicit. *Præ-* " *par.* 1. Confectio ſeminis. 2. Confectio laxativa ſimplex. 3. Conf. lax. " compoſ. 4. Aqua deſtillat. ex herba & ſemine. 5. Aqua vitæ Aniſata. " 6. Oleum ſtillat. N. B. Aniſum diu macerare oportet. Sic dat ℔j. olei " ℥ß. 7. Sal. 8. Species Dianiſ." *Schrod.* 535.

" Aniſi ſemen eſt acre, ſubamarum, ut prope ad urentium accedat calidita- " tem. Vid. *Galen. Simpl.* l. 6. p. 43. C.

1. It is a ſweet oily aromatic ſeed, neither hot nor bitter; but pleaſant to both taſte and ſmell: hence it is often put into bread. " Odore ac ſapore " gratiſſimo, dulci, cum jucunda quadam acrimonia.' *R. H.* " Saporis dul- " cis & calidi; odoris dulcis & aromatici." *Nucl. Belg.* 23. " Saporis & odo- " ris fragrantis." *Dale* 126. " The ſeeds are of a pleaſant ſmell, and of an " hot but very ſweet taſte." *Miller's Bot.* 41. — 2. It is commended outward- ly (oleum præcipue) as anodyne in clyſters, &c. inwardly for childrens gripes, given among their meat, or to their nurſes, whoſe milk alſo it is ſaid to in- creaſe. " Lactantis infantis lotium redolet Aniſum, ſi nutrix oleum Aniſi, " ore tenus ſumpſerit." *Helmont Butler*, p. 559. " Video itaque remedia " anethi, carvi, aniſi, cymini, dauci, &c. non a ſcholis, terminum cauſas " ignorantibus, eſſe inventa; ſed parvulis atque pauperculis, commiſeratione " divina, enotuiſſe a quibus ſcholæ, ut & reliqua plura experimenta, iſthinc " mendicarunt." *Id. de Flatibus*, p. 402. It was one of Pythagoras's favourite medicines, according to *Pliny*, l. 20. c. 17. p. 330. " Virulentorum anima- " lium venenis adverſatur, alvum & alba fœminarum profluvia ſiſtit, lactis " ubertatem præſtat, Venerem ſtimulat, &c." *Dioſcorid.* l. 3. c. 65. p. 200. —3. " Analyſi chymica, ex totius Aniſi plantæ recentis ℔v. dempta radice, " prodierunt humorum ℔iij. ℥vij. gr. lx; olei ʒv. gr. xxxiv; carbonis ℥ij. " ʒviß, unde cinerum ʒix. gr. lx. & inde ſalis fixi alcali ʒvij. gr. xxvj. (ergo " terræ ʒij. gr. xxxiv.) ac jactura fuit ℔j. ℥v. ʒiij. gr. xiv." *Geoff.* iii. 94. Here was very little earth, but an immenſe jactura. He ſays alſo that ſeminis ℔j. yields by expreſſion olei ſubviridis, odorati, palato grati, ac dulcis, a ʒvj. ad ʒix. & amplius, quod frigore facile concreſcit. " Heurnius ſemini Aniſi " pulverato, & ad ℈j. cum pulte propinato infantes tam valide purgari " aſſerit, quam ætate provectiores rhabarbaro. Infantium tormina & con- " vulſivos motus ſedat; unde ab Helmontio ſolamen inteſtinorum audit; & a " quibuſdam anima pulmonum dicitur." *Id.* iii. 96. It is one of the greater hot, or carminative ſeeds. " Fœniculum, carvi, cuminum, ſemen, Aniſi." *Marg.*

SECT. III.

It is given to ʒj. or ʒij. The eſſential oil ad gut. v. or vj. It is in the Mithridatium and Theriaca. The ſaccharum Aniſatum is now out of uſe. " Pulvis a ℈j. ad ʒj. intus ſumitur, oleum expreſſum & diſtillatum a gut. ij. " ad x. vel xx. præſcribuntur." *Geoff.* iii. 96.

APIUM.

APIUM. *Vide* p. 379. vol. I.

AQUILEGIA.

SECT. I.

Aquilegia. *offic.* Aquilegia ſylveſtris. *B. P.* 144. *T.* 428. *H. Ox.* iii. 457. Aquilegia flore ſimplici. *J. B.* iii. 484. *R. H.* 706. *Syn.* 273. A. cœrulea. *Ger.* 1093. A. vulgaris flore ſimplic. *Park.* 1379. par. 271. Iſopyrum Dioſcoridis. *Col. Phyt.* p. 1. Aquileia. *Dod.* 181. Aquilegia. *Cæſ.* 589. *H. Cliff.* 215. *G. Pl.* 251. Common Columbine.—The ſeeds are ſmall, ſomewhat oval, ſmooth, of a ſhining black colour, a diſagreeable, ſweetiſh, reſinous taſte, and not unpleaſant ſmell.

It grows in ſome woods and thickets in England, flowering in June. "*Offic.* Semen, tum flores & herba." *Schrod.* 537. "*Uſu.* Herba, flores, ſemen." *Dale* 180. "Herba, ſemen." *Pharm. Lond.* 1721. "Folia, ſemen." *Pharm. Edinb.* "The leaves and ſeed are uſed." *Miller's Bot.* 45. The ſeed itſelf is little uſed, and thrown out of the *London M. M.* "Uſus eſt ſeminis tantum. Diverſitas tantum non infinita eſt in floribus. Semen etiam indiſtincte carpitur, modo ex hac modo ex illa." *Hoffman.* p. 107. Columbina a columba; Aquilegia ab aquila, a petalorum forma, fortè; vel Aquilegia ab aqua & lego, becauſe the leaves retain water. "Neſcio ſane quid flori huic commune ſit, vel cum aquila, vel cum columba." *Hoffman,* 107. How the antients called it, if known to them, is altogether uncertain. Vid. *B. P.* and *Hoffman,* l. c. for conjectures.

SECT. II.

It is emollient and diuretic; called alexipharmic; and commended in the jaundice, gravel, ſcurvy, ſmall-pox, meaſles, gripes, &c. "Olus emolliens eſt."

"Calfacit moderate, ſiccat 1. aperit epar & lienem, ac imprimis meatum biliarium, unde regio medetur morbo: ciet urinam & menſes, vulnera conſolidat, ventris tormina ſedat. N. B. Semen in expellendis morbillis ac variolis, uſus mulierculis eſt creberrimi. Extrinſecus frequens ejus uſus eſt ad putredinem gingivarum ſcorbuticam emendandam, ulceraque oris fauciumque ſolidanda. *Præpar.* 1. Aqua ſtillat. ex foliis floribus, & radice, Auguſto collectis. 2. Conſerva ex floribus, quæ rari uſus eſt. 3. Acetum, ex infuſione florum." *Schrod.* p. 537. Semen ſtimulans aromaticum eſt in *Boerh. Lib. de M. M.*

The ſeed 1. is of a ſomewhat reſinous, ſubviſcid, ſweetiſh, and diſagreeable taſte; and not unpleaſant, and as it were balſamic, ſmell. "Radix ſaporis, ſubdulcis eſt." *J. B. R. H.* "Semen ſaporis mucilaginoſi, ingrati, cum obtuſa acredine. Debilius eſt ſemine althææ." *Herman.* MS. It is farinaceous and oily: and—2. commended in the jaundice by Tragus and Matthiolus;

thiolus; in difficult labour by Cluſius; in the ſmall-pox and meaſles, to expel them, by Herman, &c. Vid. *R. H.* 707. "Camerarius docet decoctum "herbæ totius, cum momento ambræ, contra ἀδυναμιαν facere." *R.H.* "In "uſu folia, quæ ſemen virile ſpirant ſi conterantur." *Boecler. in Cynoſ. Herm.* p. 419. For the ſtone, they uſe the root in Spain. Tragus commends it for the colic. Etmuller for the ſcurvy. "Folia noſtratibus in uſu ſunt in collu- "tionibus & gargariſmis, contra affectus faucium & aſperæ arteriæ calidos." *R. H.* Mr. *Geoffroy* gives no analyſis; nor mentions the taſte of either herb or ſeed; yet he ſays, "Semen multum olei & ſalis ammoniacalis continet." iii. 110. But I muſt own I am not ſatisfied as to its virtues. Is the herba an *olus molle?* — 3. Foliorum recentium thea is of a ſweetiſh leguminous taſte, not unlike that of aſparagus; of a fine tranſparent greeniſh colour, with a caſt of purple. Syr. viol. & ſol. heliotrop. are not ſenſibly altered by it. Aqua calcis, or ol. tartari, gives it a beautiful emerald-green colour; as ſp. aceti turns it to a fine ruby-red: after ſtanding alone eight or ten days it ſtunk abominably. It appears from theſe experiments to be antacid, detergent, diuretic, &c.

ATRIPLEX.

SECT. I.

1. Atriplex. *offic.* Atriplex hortenſis alba ſive pallide-virens. *B.P.* 119. *T.* 505. *H.Ox.* ii. 607. Atriplex alba & rubra hortenſis. *J.B.* ii. 970. *R.H.* 191. A. ſativa. *Lob.* 127. A. ſativa alba. *Ger.* 325. A. ſive olus aureum. *Park.* par. 488. Atriplex caule erecto annuo, foliis triangularibus. *H. Cliff.* 469. White Garden Orrache or Arrach.—The ſeed is ſmall, round, and blackiſh, difficultly parting with its ſeed-caſe, or two round valves, formed of the enlarged calyx. ("The ſeeds are of two ſorts, one ſmaller by half than "the other, blacker, and more ſhining." *Miller's Bot.* 65. Sometimes a ſmall greyiſh ſeed of ſome chenopodium is kept for it.) They are of an inſipid taſte, and no ſmell.

2. Atriplex fœtida. *offic.* Atriplex olida. *Pharm. Lond.* p. 5. A. fœtida. *B.P.* 119. *J.B.* ii. 974. *H.Ox.* ii. 605. Atriplex olida. *Lob.* 128. *Ger.* 327. *R. H.* 198. Garoſmos. *Dod.* 616. Vulvaria. *Tab. Ic.* 428. Atriplex olida, ſive ſylveſtris fœtida. *Park.* 749. Blitum fœtidum, vulvaria dictum. *R. Syn.* 156. Chenopodium fœtidum. *T.* 506. Chenopodium foliis triangulari-ovatis, *H.Cliff.* 84. Stinking Arrache.—"Habitat in Tartaria." *Lin. Sp. Pl.* p. 1053. "Atriplex hortenſis nonniſi ſata provenit, inquit *J. B.* Aſt proculdubio "alicubi terrarum ſpontis ſuæ eſt, quamvis locus ille nos hactenus lateat." "*R. H.* 191. "Atriplex olida juxta parietes, & in locis ruderatis provenit, "ſed rarius." *R. H.* 198. An indigena? The leaves and ſeed of the firſt, and herb of the ſecond, are uſed. "*Officin.* Atriplicis folia, ſemen rarioris "uſus eſt." *Schrod.* 541. "*Uſu.* Atriplicis folia, ſemina. A. olidæ herba." *Dale* 74. "A. ſativæ herba; A. fœtidæ herba, ſemen." *Pharm. Edinb.* "Atriplicis olidæ folia." *Pharm. Lond.* M. M. 5.

"Atriplex, ἀτραφαξις, παρα το ἀθροως ἀυξειν, cum octavo die a ſatu pro- "deat, Theoph. 7. hiſt. 1; χρυσολαχανον, olus aureum, a luteo flore, quem

"fert

" fert Dioſcorid. l. 2. c. 145. (p. 137.) cui & Plinio l. & c. 20. (p. 533.)
" genera duo, ſylveſtre & ſativum." *B. P.* 119. " Atriplex aliis ab atro co-
" lore, quod comeſtum faciat homines lividos." *R. H.* 191.

" Atraphaxis, aliis chryſolachanon, cognitum olus eſt & duorum generum,
" ſylveſtre & ſativum. Coctum id oleris inſtar eſtur, alvumque mollit: pa-
" nos vero diſcutit ſive crudum, ſive coctum illinatur. Semen autem ex aqua
" mulſa potum ictero medetur." *Dioſcor.* l. 2. c. 145. p. 137. " Atriplex
" (ἀνδραφαξις) humida eſt, neque tamen alvum dejicit." *Hippoc. de victus ra-
tione*, l. 2. p. 359. lin. 43.

SECT. II.

The ſeed of the garden Arrache is ſaid to be purgative and emetic. The leaves are diluent, emollient, and laxative; and uſed as a potherb; ſometimes alſo in cataplaſms and clyſters, though but ſeldom.

Stinking Arrache is emollient and deterſive; called uterine; and commended in female obſtructions, hyſteric diſeaſes, &c. in conſerve, ſyrup, infuſion like tea, or decoction, and tincture.

" Atriplicis ſylveſtris & hortenſis folia refrigerant 1. humectant 2. leni-
" unt dolorem. Hortenſis inſuper culinaris & alimentoſa eſt; ſylveſtris au-
" tem in ſolvenda alvo celebris. *Uſus officinalis* præcipue externus eſt, in cly-
" ſteribus ac epithematibus paregoricis. *v. g.* antipodagricis, tum quoque in
" lotionibus pedum ſomni cauſa paratis." *Schrod.* 541. Olus molle eſt in *Boerh. Lib. de M. M.* " Atriplex olida uterina eſt, menſes provocat, fœtum
" mortuum ſecundinamque expellit, in hyſtericis multum prodeſt." *Dale* 75.

The virtues of the Arrache depend on its diluent watry ſaline juice, perhaps rather ſaccharine than nitrous; and on its ſubviſcid nouriſhing ſubſtance: both which render it uſeful, when the blood is too thick, or the fibres too rigid and too elaſtic. The ſame may be ſaid of all the olera mollia; ſpinachia, beta, bonus Henricus, &c. As for the cathartic quality of the ſeed, we have Rhaſis's and Matthiolus's authorities for it, though its taſte diſcovers nothing of it. " Scribit Serapio Raſim vidiſſe hominem quendam, qui ex Atriplicis
" ſemine ʒij. pondere ſumpto, crebris tum vomitionibus, tum alvi dejectioni-
" bus vexatus fuit, adeo ut ad extremam virium imbecillitatem devenerit.
" Quod mihi quidem mirum non eſt, quandoquidem novi ego pharmacopo-
" lam quendam, qui ad ruſticos purgandos Atriplicis tantum ſemen exhibe-
" bat: quod iis non ſine moleſtia magna, alvum abunde ciebat, atque etiam
" ſimul crebros provocabat vomitus: quæ tamen facultas paucis, ut puto,
" hactenus innotuit." *Matthiol.* p. 364. And by as few, I think, it is thus uſed at preſent; though Pliny takes notice both of the cathartic and emetic virtues of this ſeed. Vid. l. & c. 20. p. 534.

" Analyſi chymica, ex foliorum Atriplicis albæ ℔v. prodierunt humorum
" ℔iv. ʒixß. gr. xxxviij; ſalis volatilis urinoſi gr. xiv; olei ʒvj; carbonis ʒiv,
" unde cinerum ʒij. ʒiij. gr. xxviij. ac inde ſalis fixi alcali ʒiß. gr. xviij. (ergo
" terræ ʒvij. gr. x.) & jactura fuit ʒj. ʒv. gr. iij." ſecundum *Geoff.* iii. 142. More than ʒxxxviij. humoris which came firſt, ſalſi & alcali notas præbuerunt; and there was little acid in the remainder: and here much fixed ſalt, but little

oil. " Atriplex itaque ſale eſſentiali donatur ſalſo, ammoniacali, nitroſo, qua-
" lis exurgeret ex mixtura ſpiritus nitri & ſalis volatilis urinoſi, cum olei por-
" tione non mediocri conjunctis, multo phlegmate dilutis & pauca terra." *Ibid.* p. 143. An extravagant inference, without any foundation that I can diſcover!

Foliorum Atriplicis hortenſis rubræ *B. P.* thea is of a claret-wine colour, and inſipid herbaceous taſte; and becomes of a browniſh-black colour, when mixed with a ſolution of vitriol, precipitating a grayiſh-black ſediment. *An ſubaſtringens eſt? Minime.*

Stinking Arrache is 1. of a diſagreeable, herbaceous, and as it were deterſive taſte, and fetid fiſhy ſmell. " Odoris viroſi intollerabilis, ut qui vel attactu
" levi manus ita inficit, ut longo tempore vix poſſit elui." *J. B. R. H.* " Fœtida hæc herbula eſt, corrupta putridaque ſalſamenta, ac fœtens horum
" jus graviſſimo moleſtiſſimoque odore ſuperat." *Dod.* 616. " It ſmelleth
" like old rotten fiſh, or ſomething worſe." *Park.* 749. " Folia odore viroſo
" garum putridum referentia, præſertim ſi digitos inter conterantur." *Geoff.* iii. 144. — 2. Herbæ thea is of an herbaceous unpleaſant taſte, and a moſt diſagreeable ſmell. A ſolution of vitriol does not blacken it, but precipitates a grayiſh ſediment. It dilutes ſyrup of violets; and makes a ſolution of turnſole more purpliſh only. — 3. " Analyſi chymica ex A. fœtidæ floridæ ℔v.
" prodierunt humoris primo limpidi, deinde flaveſcentis, odoris & ſaporis
" ſalſi lixivioſi, qui alcali urinoſi notas præbuit ℔iij. ʒvijß; humoris
" ſalſi, tum alcali urinoſi, tum ſubacidi ℔j. ℥iv. ʒviß; humoris empyreuma-
" tici ſale volatile urinoſo imprægnati ℥iß. gr. xxiv; ſalis volatilis urinoſi ʒiij.
" gr. xij; olei ℥j. ʒvij. gr. xxxiij. Carbonis fuerunt ℥iv. ʒviiß, unde cinerum
" ℥ij. ʒvij. gr. xlviij. & inde ſalis fixi alcali ℥j. ʒvij. gr. xxx. (ergo terræ ℥j.
" gr. xviij.) ac jactura fuit ʒxj. gr. xxxix." " Tota planta odorem fœtidum
" ammoniacalem urinoſum refert, & conſtat ſale eſſentiali ammoniacali, fere
" explicito, & oleo craſſo copioſo permixto." *Geoff.* iii. 145. Hence it is more alcaline than the former; and may be ſaid to contain a ſal volatile fœtidum, or ſpiritus volatilis fœtidus, rather than a ſal ammoniacus explicitus: ſo that it is an attenuating ſaponaceous ſubſtance. But its fœtor ſeems firſt to have recommended it; and that not very long ago; but more in Britain than elſewhere. I have not obſerved it often in foreign pharmacopœias. The Pariſian indeed has it: and it is retained in the London diſp. where it was firſt received in the year 1721.

" Bonus hic henricus inquit Tragus, vermes in ulceribus putridis animan-
" tium quadrupedum natos excutit, certiſſimo experimento, ſi herba tuſa ul-
" ceribus imponatur; id quod non ſemel ipſe vidi. Sunt qui vermes ejici di-
" cunt, ſi herba ſolum adalligetur jumento," *J. B.* ii. 975. " Nullus uſus
" eſt herbæ, ex utero tamen laborantibus, gravitate odoris prodeſſe poteſt:
" nam, uti Hippocrates ait, cum uterus ſtrangularit, ad nares graveolentia
" adhibenda." *Dod.* 616. Would not ſtinking rotten fiſh then do as well?
" Folia contuſa cum ſaccharo conſervam efficiunt hyſtericis utiliſſimam (D.
" Needham) herba arefacta, & in aqua cocta, inſtar theæ, mire paſſioni hy-
" ſtericæ prodeſt (D. Palmer)" *R. H.* 198. " The tincture of this plant,
" drawn with brandy, is good for the vapours." *T. Hiſt. pl.* 17. " In paro-
" xyſmis hyſtericis, ejus decoctum pro clyſtere utile cenſetur." *Geoff.* iii. 145.
It is in none of the compoſitions *Pharm. Lond.*

BOMBAX.

SECT. I.

Bombax, Gossipium, Xylon. *offic.* Gossipium fruteſcens, ſemine albo. *B. P.* 430. Gossipium, ſive Xylon. *Dod.* 66. *Ger.* 901. G. fruteſcens annuum. *Park.* 1553. G. herbaceum ſemine albo. *H. Ox.* iii. 517. G. Braſilianum, flore flavo *Par. B. prod.* 337. *Cat. Jam.* 156. Xylon, ſive Gossipium herbaceum. *J. B.* i. 343. *T.* 101. *R. H.* 1164. Gossipium caule decumbente. *H. Cliff.* 350. The Cotton Plant or Buſh.—The ſeed is about the bigneſs of a pea, ſomewhat oval, containing in a dark brown (though ſometimes green, white, or black) coloured huſk a white kernel, taſting like ſweet almonds. "Eſt bonum quamdiu medulla vireſcit." *Hoffman* 251.

Cotton grows in both the Indies. There are ſeveral ſpecies of it: in *B. P.* there are three beſides the above-named. *Ligon*'s beſt American Cotton has a green ſeed. I have often raiſed and ſometimes had it nearly ripe, ſo that the ſeed grew. It is cultivated and grows freely in ſeveral places of Europe, as Italy, Sicily, Cyprus, Candy, &c. There are fields of it between Jeruſalem and Damaſcus: and it is incredible how much Cotton Malta yearly exports. "The iſland Malta, which is about ſixty miles in circumference, ſells yearly "of cumin ſeed 348000℔ weight; of aniſe ſeed 116000℔. each at ſeven, "eight, or nine crowns the cantare, *i. e.* 116℔; and of Cotton-wool, in the "huſk, 14000 cantares, *i. e.* 1624000℔ weight." Vid. *Mr. Ray's Travels in Harris's Coll.* ii. p. 571.

"Ut Græce ξυλον & γοσσιπιον, ita Latinis Xylon & Goſſipium nominatur. "At Theoph. 4. hiſt. 9. δενδρον ἐριοφορον, dicitur. In Tylo, inquit, inſula "multæ ſunt arbores lanigeræ, quæ folia vitis habent, verum minora, fruc"tum fert in quo lana continetur mali magnitudine, vere naſcitur occluſum, "quod cum maturum eſt aperitur, & lana excipitur, qua telas texunt. . . . . "Plinius, l. 19. c. 1. (ſub finem) inter lini genera recenſuit, his verbis: fru"ticem quem aliqui Goſſipion vocant, plures Xylon, & ideo lina inde facta "Xylina: parvus eſt, ſimilemque barbatæ nucis defert fructum, cujus ex in"teriore Bombyce lanugo netur: nec lina ſunt eis candore mollitieve præfe"renda." *B. P.* 430. "Eſt Coto & Bombax Serapioni: Bombax officina"rum." *Ibid.* It ought to be Bombyx, not Bombax. . . . The firſt Greek writer I find the ſeed in, as a medicine, is Myrepſus, who, *Antidot.* ſect. 1. c. 425. p. 447. in an antidotus cardiaca, has, among a vaſt number of ingredients, carnis ſeminis Goſſipii (βαμπάκιος) about ʒß. He, probably, had it from the Arabians. Vid. *Bod. in Theoph.* p. 425. Geoffroy does not mention it.

SECT. II.

The ſkin of the ſeed is mucilaginous and antacrid; agreeing with althæa, as the kernel does with ſweet almonds, in virtues, being reckoned pectoral and reſtorative. But it is never uſed here now-a-days.

" *Officin.* Semen & lanugo, Goſſipium officinarum (dicitur Cottus ſeu Cotta " & Bombax Serapioni.) *Vires.* Lanugo calfacit & ſiccat: ſemen pulmona- " rium eſt, tuſſientibus & aſthmaticis maxime proficuum, auget ſemen. N. " *Uſus* tum feminis, tum lanuginis rarus eſt modernis." *Schrod.* p. 548.

The kernel is oily and farinaceous; and the plant in character comes near the malva or althæa. The Egyptians uſe much the mucilage of the ſeeds in ardent fevers, coughs, and for corroſive poiſons; and the lanugo, as we do lint for wounds and ulcers. Is it not too elaſtic for this purpoſe? Vid. *R. H.* " Serapio dicit ſemen calidum & humidum eſſe. Id ipſum monſtrat ſapor " ille ſuavis, nucleis pineis, aut amygdalis non abſimilis." *Hoffman*, p. 251. The expreſſed oil is reckoned coſmetic.

BRASSICÆ.

SECT. I.

1. Braſſica, Caulis, *offic.* Braſſica capitata alba. *B. P.* iii. *T.* 119. *J. B.* ii. 826. *H. Ox.* ii. 206. *Ger.* 312. *R. H.* 794. Braſſica capitata albida. *Dod.* 623. B. capitata vulgaris. *Park.* par. 503. Braſſica, radice cauleſcente, tereti, carnoſa. *H. Cliff.* 338. Common White Cabbage, or Colewort.—It is one of the many varieties, which culture, aſſiſted by different climates, has produced, from (probably) the ſeed of the Braſſica maritima arborea, ſeu procerior, ramoſa, *H. Ox.* ii. 208. *T.* 220. *R. Syn.* 293. Braſſica arborea, ſeu procerior ramoſa maritima, Moriſoni. *R. H.* 796. Braſſica maritima Petiv. *H. B.* 45, 6. An B. rubra vulgaris *J. B.* ii. 831? Sea Colewort, or Cabbage; " which " grows on Dover cliffs, and divers other the like places in England." *R. Syn.* The ſeed of any of them may be uſed indifferently.

2. Napus, Napus ſylveſtris, Bunias. *off.* Napus ſylveſtris. *B. P.* 95. *T.* 229. *J. B.* ii. 843. *H. Ox.* ii. 214. *R. H.* 802. *Syn.* 295. Bunias, ſylveſtris Napus, *Lob. Adv.* 67. Bunias ſylveſtris Lobelio. *Ger.* 235. Bunias, ſive Napus ſylveſtris. *Park.* 865. Braſſica radice cauleſcente, fuſiformi. *H. Cliff.* 339. Rape or wild Navew.—" Inter ſegetes & in aggeribus foſſarum ſponte & quidem frequens oritur apud nos in Anglia." *R. H.* It is a controverſy whether the ſeed of this or of the Napus ſativa *B. P.* 95, Navew-gentle, or ſweet Navew, is to be preferred, for the theriaca; though it is a thing of no moment. Vid. *Dale* 202. Any Cole or Turnep ſeed may ſupply its place. " Napus, *βουνιας* " Dioſcoridi, l. 2. c. 136. Significatione a tumente figura deducta, quare " rapis hoc nomen magis competere, ſunt qui velint: *γογγυλης* ſpecies Galeno. " Differentias duas & in medicina Græcos ſervare Plinius, l. 20. c. 4. ſcribit, " alterum Bunion, alterum Buniada vocantes: ſunt qui Buniaden Napum ſyl- " veſtrem eſſe velint. At l. 19. c. 5. Naporum genera quinque facit, ubi " legendum eſt Raphanorum, cum ex Theoph. 7. hiſt. 4. deſumpta ſint, ubi " *των ραφανιδων* genera quatuor dicit." *B. P.* 95. Dioſcorides does not deſcribe it. The N. ſativa, however, is but a variety of the ſylveſtris, which is a ſpecies Braſſicæ *Linnæo.*

N. B. " Braſſicæ laudes longum eſt exequi, cum & Chryſippus medicus " privatim volumen ei dicaverit, per ſingula membra hominis digeſtum, &

" Dieuches: ante omnes autem Pythagoras & Cato non parcius celebrarint. " Cujus ſententiam vel eo diligentius perſequi par eſt, ut noſcatur, qua medi-" cina uſus ſit annis ſexcentis Romanus populus." *Plin.* l. 20. c. 9. It is κραμβη in *Dioſcor.* l. 2. c. 146. p. 137. who gives no deſcription of it. But ſeveral marks of it are found in *Theophraſtus*, who calls it alſo ῥαφανος. Vid. *Bod. in Theoph.*

SECT. II.

Theſe are antacrid, attenuant, and diuretic; called anthelmintic and alexipharmic; and commended internally for the ſcurvy, worms, malignant diſeaſes, &c. and externally (folia) as detergent vulneraries. Uſed by way of diet they are nouriſhing, laxative, and alcaliſcent.

" *Officin.* Folia, jus foliorum, ſemen. Folia calfaciunt & ſiccant citra acri-" moniam; vulneraria ſunt, ebrietatem arcent, aſtringunt & laxant, adeoque " qualitatis mixtæ; nimirum ut aiunt Salernitani, *jus caulis ſolvit, cujus ſub-" ſtantia ſtringit.* Extrinſecus, uſitatum eſt ruſticis vulneribus folia imponere, " ut conſolidentur, quinimo & pleuriticis doloribus impoſita, eos mitigant. " Semen eadem pollet qualitate cum foliis. *Præpar.* Loch de caule." *Schrod.* " Semen laxat, lumbricos necat, ebrietatem arcet." *Marg. M. M.* Antiſcorbuticum lenius eſt in *Boerh. Lib. de M. M.* " Braſſicæ ſemen potum lumbri-" cos expellit, ac in antidota quoque theriaca (εις ἀντιδοτους θηριακας) addi-" tur." *Dioſcor.* l. c. " Napi ſativæ ſemen calfacit, ſiccat, abſtergit, aperit, " digerit, attenuat, & incidit, venenis potenter reſiſtit (unde & theriacam " Androm. ingreditur) morbillos ac variolas, peculiari facultate, a centro ad " circumferentiam corporis pellit; ideoque in febribus malignis & petechiali-" bus crebri uſus eſt (in emulſionibus). Confert & in ictero, urina remorata, " &c. Doſis ʒj. *Præpar.* Oleum expreſſum." *Schrod.* 632.

1. The ſeeds are of an oily, hot, and bitteriſh taſte, and no ſmell. The leaves taſte ſomewhat ſweet, but more ſo when boiled; and, whether raw or decocted, ſoon putrify and become very fœtid and acrid; as the decoction alſo does.—As the different kinds agree in appearance, character, taſte, and ſmell, I give them the ſame virtues; in which they differ little from eryſimum; only being more agreeable, and fleſhy; on which account they are more uſed in food. — 2. According to Galen the broth or decoction by itſelf, or the not too much boiled cabbage with the broth, is laxative: but the ſubſtance without the broth, eſpecially if boiled in two or three different waters, is binding or aſtringent: which opinion has been generally adopted ſince. Hence,

" Jus caulis ſolvit, cujus ſubſtantia ſtringit,
" Utraque quando datur, venter laxare paratur." *Schola Salern.*

Yet I cannot help thinking the ſubſtance more laxative; and the decoction more diuretic. " Braſſica acrimoniam quandam habet, qua feceſſum movet; " & ſimul boni ſucci eſt. *Hippoc. de Affect.* p. 529. " Braſſica (κραμβη) cale-" facit, per alvum ſecedit, & bilioſa educit." *Idem de Vict. rat.* l. 2. p. 359. —3. The analyſis of the Cabbage and Collyflower, as Mr. Geoffroy gives them, differ more than the ſubſtances themſelves, which cannot be called different ſpecies, both eaſily degenerating into open Coleworts. Vid. *Hiſt. Ox.*

" Braſſica,

" Braſſica omnibus oleribus anteſtat. Eam eſto vel coctam vel crudam. " Crudam ſi edas, in acetum intingito, mirifice concoquit, alvum bonam fa- " cit, lotiumque promovet, ac ad omnes res ſalubris eſt. Si voles in con- " vivio multum bibere, cœnareque libenter, ante cœnam eſto crudam, quan- " tum voles ex aceto. Et item ubi cœnaveris comeſto alia quinque folia, " reddent te quaſi nihil comederis, biberiſque, bibeſque quantum voles." (Here follow directions how to prepare it, ſo that it may prove cathartic; and alſo how to make it diuretic). " Ad omnes tumores, ad omnia vulnera eam " contritam imponito. Hæc omnia ulcera purgabit, ſanaque faciet ſine dolore; " tumida concoquet; vulnera putrida, cancroſque purgabit, ſanoſque faciet, " quod medicamentum aliud facere non poteſt." (He then commends it for fiſtulas, luxations, contuſions, arthritic diſeaſes, troubleſome dreaming, colics, &c. makes the urine of ſuch as eat it a fine medicine: and adds,) " Quo li- " bentius edas aceto mulſo ſpargito, mentham addens ſiccam, & rutam, & " coriandrum, ſale ſparſam paulo libentius edes. Id bene faciet, & mali nihil " ſinet in corpore conſiſtere, & alvum bonam facier. Si quid antea mali intus " erit omnia ſana faciet. De capite & de oculis omnia deducet, & ſanum fa- " ciet. Hanc mane eſſe oportet jejunum. Et ſi bilis atra eſt, & ſi lienes " turgent, & ſi cor dolet, & ſi jecur, aut pulmones, aut præcordia, uno " verbo omnia ſana faciet, quæ intro dolitabant, &c. &c. Hæc inter alia " *Cato*." *J. B.* ii. 824.

1. Analyſi chymica Braſſicæ capitatæ foliorum ℔v. præbuerunt humorum ℔iv. " ℥xj. ʒj. gr. xxxiv. (of which all except about ℥xiij. was ſaporis obſcure acidi, " manifeſte acidi, or intenſe acidi;) ſalis vol. urinoſi gr. xx; olei ʒiij. gr. xxij. " Carbo pendebat ℥iij. gr. vj, unde cinerum ʒv. gr. xl. ac inde ſalis fixi mere " alcali, ʒij. gr. lxvi. (ergo terræ ʒij. gr. xlvi.) jactura fuit ʒx. gr. lxij. (ſum. " ℔v.) Per hanc analyſim liquet Br. capitatam ſale eſſentiali donari tartareo, " nitroſo, ammoniacali, cum olei portione mediocri conjuncto. 2. Ex Braſ- " ſicæ cauliflore ſummitatum recentium ℔v. prodierunt humorum ℔iv. ℥viij. " ʒvj. gr. xliv. (all ſaporis obſcurè alcali, or alcali urinoſi, except the firſt " ℥xiv. ʒiiß. which were obſcurè acidæ; as the laſt ℥vß. fere, were ſale vola- " tili urinoſo copioſo impregnatæ); ſalis vol. urinoſi ʒiij; olei ʒxj. gr. vi. " Carbo pendebat ℥ij. ʒviß, unde cinerum ʒvj. gr. xxiv. ac inde ſalis fixi " mere alcali ʒiv. gr. lxvj. (ergo terræ ʒj. gr. xxx) & jactura fuit ℥iiß. " gr. lxiv. (ſum ℔v. gr. vj.) Ex hac analyſi concludendum ſalem eſſentia- " lem B. caulifloræ eſſe ammoniacalem." *Geoff.* iii. 216. But both the analyſes & concluſions here appear to be faulty. He deſcribes ſix kinds of Braſſicæ; and is long enough on their virtues (employing ſeven pages on this article) which are taken almoſt intirely from *R. H.* without naming him once. See *R. H.* for its uſe in warts, wounds, ulcers, ſcurvy, pains, &c.

LEC-

LECTURE LXIX.

CANNABIS.

SECT. I.

Cannabis. *offic.* Cannabis ſativa. *B. P.* 320. *T.* 533. *R. H.* 158. *H. Ox.* iii. 433. *R. Syn.* 138. *Park.* 597. Cannabis fœcunda. *Dod.* 535. Cannabis mas. *J. B.* iii. 447. *Ger.* 708. Cannabis fructum ferens, non florens, *Cæſ.* 157. "Ba. & Ma. *Kæmpf. Jap.* 897. Cannabis foliis digitatis, fœmina." *H. Cliff.* 457. Winter Hemp.—This has a ſmooth, ſhining roundiſh ſeed, containing, under a thin grayiſh ſhell, a white kernel, of an oily ſweetiſh taſte, and ſomewhat heavy ſmell, if recent and bruiſed.

It is ſaid to grow in the Eaſt-Indies, Malabar, Japan, &c. "Præterito "anno inter ſemina Japonica, & Cannabis fuit enata in magnitudinem duplo "humanam, & arboreſcens quaſi, tamen annua, ne unica nota a noſtra diver- "ſa." *H. Cliff.* 457. I find it not in Hippocrates, nor Theophraſtus, though it is mentioned by Herodotus, l. 4. "Cannabis ſativa, planta ad texendos "funes validiſſimos (ἐυχρηστον ἐν τω βιω) mortalium generi perutilis, folia "gerit fraxini, ſed fœdi odoris, caules proceros, inanes, ſemen rotundum; "quod cibo largiore genituram extinguit. Ex eo recente expreſſus ſuccus "convenienter aurium doloribus inſtillatur." *Dioſcor.* l. 3. c. 165. p. 240. Pro etymol. vid. *Bod. in Theoph.* p. 945. "Qui inebriantium gaudent varie- "tate, vel opii ſapore non admodum capiuntur, illi a Cannabe ecſtaſin petunt "temulentiæ. An hæc vera ſit Cannabis noſtras, an ejus quædam ſpecies "Bangue dicta, (*H. Mal.* x. p. 119. deſcripta) hic non diſquiſivero. Mihi "ut ovum ovo, in omnibus noſtrati ſimilis apparuit, cum mas, tum fœmina: "adeoque crederem cœlo ſoloque acceptam debere virtutem ſuam." *Kæmpf. Amæn.* p. 645. "Bangue a Cannabe plantam ſpecie diſtinctam eſſe ab eru- "ditiſſimo viro, & rei herbariæ peritiſſimo D. Hans Sloane certior factus ſum." *R. H.* 159. But Kæmpfer's Amœnit. are twenty-ſix years later than *R. H.* "Locum natalem nondum novimus, verum in omnibus fere regionibus in agris feritur." *R. H.* Vid. *H. L. Bat.* p. 25.

SECT. II.

It is antacrid and anodyne; called antaphroditic; and commended for coughs, heat of urine, gonorrhœa, &c. The leaves are narcotic.

"*Officin.* Semen, raro herba. Semen calfacit (*aliis* refrigerat) ſiccatque, "ſemen genitale imminuit (uſu continuato) tuſſi opitulatur, ictero ſubvenit: "at caput vaporibus replet. Herba refrigerat & ſiccat, ambuſtis convenit, "aurium dolores (ab obſtructione natos) ſanat ſuccus inſtillatus." *Schrod.* 553. "Hæc planta opii incommoda inducit, etiam ſolo odore: ejus ſeminibus uti- "mur tanquam leniter narcoticis, & valent ad morbos pectoris, ad tuſſim,

"ad

" ad affectus viarum urinariarum, ad gonorrhœam, et ad ardores Veneris." *Nucl. Belg.* p. 58.

1. The ſeed is very oily; the green herb has a ſtrong heavy ſmell. " Fo-" lia odore caput tentante." *J. B. R. H.* " Semina ſunt valde oleoſa, tem-" perata, ſaporis dulcis & fatui." *Nucl. Belg.* 58. " Medulla ſeminis dulcis " oleoſa; odoris, dum recens eſt, gravis, caput ferientis." *Geoff.* iii. 248 — 2. The water in which Hemp is ſteeped is ſaid to be poiſon for every animal. " Hinc legibus Angliæ, ſub gravi mulcta, cautum eſt, ne Cannabis aut Li-" num in flumine aliquo aut aqua currente, neve in fonte, ſtagno, aliove con-" ceptaculo aquarum publico aut communi, ubi pecudum greges & armenta " ſolent adaquari, macerentur." *R. H.* 159. Its juice, externally uſed, as for pains in the ears, &c. gives eaſe. Hence it appears to be narcotic — 3. Although hens, ſinging birds, &c. ſeem much to delight in Hemp-ſeed, yet, if fed with it alone, they ſoon grow dull, ſwell, and die, of impoſtumations in their guts, as a noted bird-fancier told me. See Matthiolus's, Lobel's, and Ray's opinions relative to this in *R. H.* 158. " Semen Cannabis, ſays *Galen* (Alim. Facult. l. 1. c. 34. p. 15. F.) concoctu eſt difficile, ſtomacho-" que ac capiti nocet, pravique eſt ſucci. Sunt tamen qui eo frixo, cum " aliis tragematibus veſcantur." " In Francia orientali, referente Trago, " aliiſque nonnullis regionibus, ſemen Cannabis, quotidie inter cæteros cibos " decoquitur, non aliter quam hordeum: at caput vaporibus replet, & im-" modice ſi eſtur delirium facit, ut coriandrum." *R. H.* 158. It is ſaid by *Dioſcorides*, &c. " largiore cibo ſemen extinguere." Which may be true of the banque and of opium alſo, however much this is uſed in the eaſt. Vid. *R. H.* 158. The famous Queen Elizabeth is ſaid " contractas variolarum " ſuppuratione maculas in ſe ipſa deleviſſe, emulſione lactea, ex ſemine Can-" nabino, ſeparatis corticibus, cum aqua roſarum parata, & cum goſſipio ad-" mota." *R. H.* Ibidem. This ſeed is commended in the jaundice, in which, I think, it would rather be hurtful, being a glutinoſum pingue.

SECT. III.

It may be given in emulſion to ʒj. The oleum expreſſum is reckoned good for burnings; but little uſe is made of this ſeed here.

" Analyſi chymica ex Cannabis foliorum & ſummitatum recentium ℔v. " prodierunt humorum ℔iij. ʒxj. ʒvj. gr. lx; olei ʒiij. ʒij: carbonis fuere " ʒxj. ʒiij, unde cinerum ʒiv. ʒvj, ac inde ſalis fixi alcali ʒiv. gr. xlv. (ergo " terræ ʒiv. ʒj. gr. xxvij.) & jactura fuit ʒvß. gr. xii.) Hæc planta ſale eſ-" ſentiali ammoniacali videtur inſtructa, cum multo oleo craſſo & narcotico " conjuncto." *Geoff.* iii. 248. Cætera fere omnia ex *R. H.* innominata.

CAR-

CARDAMOMA.

SECT. I.

1. Cardamomum, Cardamomum minus. *offic.* Cardamomum ſimpliciter in officinis dictum. *B. P.* 414. Cardamomum cum ſiliquis, ſeu thecis brevibus. *J. B.* ii. 205. Cardamomum minus vulgare. *Ger.* 1547. *Park.* 1576. Cardamomum minus *Bontii* 127. *R. H.* 1204. Elettari, 2. *H. Mal.* xi. 9. The (ſmall, or) common Cardamoms.—Theſe are ſmall, brown, angular grains, of a very hot ſpicy taſte, and aromatic ſmell; contained in little triangular and tricapſular pods, of a whitiſh or pale colour.

They are brought from Malabar, and other places of the Eaſt-Indies. "It "grows in the territories of Viſapour." *Tavern. Harris*, col. 2. 373. The "ſmall Cardamums are found only on a mountain in the kingdom of Cananor." *Savary's Dict.* i. 548.

2. Cardamomum majus. *off.* Cardamomum majus officinarum. *B. P.* 413. *H. Ox.* iii. 254. Cardamomum cum ſiliquis ſeu thecis longis. *J. B.* ii. 205. Cardamomum majus vulgare. *Cluſ. Exot.* 187. *Ger.* 1542. *Park.* 1576. Cardamomum majus. *Bontii* 127. *R. H.* 1204. The Great Cardamoms.—The ſeeds are ſmall, cornered, reddiſh brown grains, of a hot aromatic taſte, and ſpicy ſmell; contained in long (roundiſh) tricapſular, and ſomewhat triangular pods, of an aſh colour.

This is now a ſtranger to the ſhops. "Ex Java ad nos deferuntur, ſed "rarius in noſtris officinis inveniuntur: alii enim grana paradiſi officinis dicta, "ſeu meleguetam, non ſine errore; alii amomum verum. Ger. horum loco "ſubſtituunt." *Dale* 252. "They grow in the iſland of Java, and from "thence were brought to us; but we have had none come over for many "years, being now grown quite out of uſe, and not to be met with in the "ſhops." *Miller's Bot.* 112. "Hæc cardamomi ſpecies raro ad nos venit." *Geoff.* ii. 367. In Holland they commonly ſhew the amomum racemoſum for it.

3. Cardamomum maximum, grana paradiſi, *offic.* Grana paradiſi officinarum. *B. P.* 413. Cardamomi genus maximum, grana paradiſi ſive melegeta. *J. B.* ii. 204. Grana paradiſi, *Ger.* 1542. Melligette, ſive Cardamomum maximum, & grana paradiſi. *Park.* 1576. Melegeta (ſeu) grana paradiſi officinis dicta. *R. H.* 1205. Grains of paradiſe—are ſmall, cornered, reddiſh-brown ſeed, like the Cardamoms, but of a much more hot and ſpicy taſte, and not ſo aromatic.

"Ex Guinea ad nos tranſportantur." *Dale* 253. They are ſaid to grow in pods, of the ſize and figure of figs. "Semina melegettas appellavere quidam, "quod milium Indicum referant, Italis melegam appellatum inquit Matthio-"lus. . . Naſcitur in Africa, inſula Madagaſcar, & Indiis Orientalibus, unde "a Batavis advehitur." *Geoff.* ii. 366. But the ſeeds only are brought to us.

4. Amomum, Amomum verum. *offic.* Amomum racemoſum. *B. P.* 413. Amomum novum Cardamomi vulgaris facie, ſive Indicus racemus, *J. B.* ii. 195. Amomum verum. *Ger.* 1548. *R. H.* 1697. Amomum genuinum. *Pa-*

kin. 1567. Elettari, i. *H. Mal.* xi. 9. The true Amomum:—which bears ſmall, cornered, blackiſh, wrinkled grains, like the leſſer Cardamoms, of a hot aromatic taſte, and fragrant ſmell; contained in roundiſh, tricapſular pods, of a whitiſh colour.

It is brought from the Eaſt-Indies; but if it deſerves the name Amomi *veri*, or not, may well be doubted. Theſe four ſeeds, whether they belong to different ſpecies of the ſame genus of plants, or not, are commonly joined together. But whether any of them are the Amomum, or Cardamomum of the ancients, with a variety of other queſtions or controverſies concerning them, is an enquiry more curious and difficult, than uſeful and inſtructive for you. You may conſult *J. B.* ii. p. 191. ad p. 208. *Bod. in Theoph.* p. 1012. ad p. 1017. and *Nicolaus Maroneas* (or *Marogna*, a phyſician of Verona) his Commentarius de Amomo, Baſiliæ 1608. in 8vo. Linden. p. 838. and Commentarius in tractatus Dioſcoridis & Plinii de Amomo: Baſiliæ 1608. in 4to. Seguier. *B. B.* p. 277.

"Dicitur ἄμωμον, ab odore bono, qui reprehendi minime queat. Hinc videntur Græci omne aroma, quod ſincerum & inculpatum eſſet ἄμωμον vocaſſe: ſic ἄμωμον λιβανιον: thus ſincerum: Arabes Hamama, Turcæ Amama vocant. Pretioſiſſimis unguentis addebatur; ut Plinius, l. 13. c. 1. & 2. & Dioſcorides, l. 1. c. 14. Poetæ pro quolibet unguento ponebant Amomum. Sic

"Et matutino ſudans Criſpinus Amomo,
"Quantum vix redolent duo funera. *Juven.* Sat. 4. v. 108. 9.
"Craſſoque lutatus Amomo. *Perſius*, Sat. 3. v. 104.

"Inde Amomiam (momiam & mumiam, vulgo) recentiores vocaverunt, "omne illud quo corpora mortuorum ungebantur & condiebantur." Vid. *Bod. in Theoph.* 1014.

SECT. II.

They all are ſtimulating aromatics, attenuant, diaphoretic, and carminative; called cephalic, ſtomachic, uterine; and commended for the palſy, vertigo, weak and windy ſtomachs, female obſtructions, fluor albus, &c. The grains of paradiſe are almoſt as hot as pepper: the leſſer Cardamoms are milder, but preferred to the other two, *viz.* Cardam. majus & Amomum.

"*Officin.* Fructus uterque Cardamomum minus, ſcil. & Grana paradiſi. *Vires.* Utrumque calfacit & ſiccat, (majus gr. 2. minus gr. 3.) partes principes recreat, attenuat, flatus diſcutit, coctionem juvat; proin conducibilis "eorum uſus eſt in affectibus capitis, ventriculi, & imprimis uteri. *Præp.* 1. "Oleum Cardamomi. 2. Confectio." *Schrod.* p. 555. "Loco Amomi "veterum recipitur acorus." *Idem.* p. 531.

They are remarkably aromatic, ſcarcely acrid, but generally agreeable. "Cardamomi (1 & 2.) ſapor fervidus." *J. B.* "Eorum ſemina aromatica." *Dale.* "Cardam. minoris ſemina ſaporis acris, calidi, camphorati, odoris aromatici. *Nucl. Belg.* p. 61. "Cardamomum minus ſaporis acris, aromatici, "ejuſdem odoris; majori præſtantius eſt. Majus ſaporis & odoris minori

"fragran-

" fragrantioris: non eſt in uſu, nam non fert ætatem ut minus." *Herman. Cynoſ.* 260. " Cardamonum minus ſapore acri, amaricante, aromatico, & quaſi " camphorato." *Geoff.* ii. 368. " Cardamomum medium Matth. majus Bon- " tii, ſapore acri, aromatico." *Ibid.* 376. Grana paradiſi " ſunt guſtu fer- " vida, ut piper & zingiber, quibus odore etiam non diſſimilia." *J. B.* " Sa- " pore acri & fervido inter Cardamomum & piper." *Dale* 253. " Saporis " acris piperini." *Nucl. Belg.* 61. " Semen guſtu acre, fervidum & urens, " ut piper & zingiber, quibus odore etiam non diſſimile eſt. Magna copia " huc affertur, & piperis vices implet in ciborum condimentis." *Geoff.* ii. 367. " Amomum, ejuſdem ſaporis cum Cardamomis." *J. B.* ii. 195. " Semina " aromatica." *Dale.* " Saporis & odoris camphorati, calidi & mordicantis." *Nucl. Belg.* p. 18. " Racemo odor ineſt fragrans, lavandulam quodammodo " æmulans, ſapore acri: in ſeminibus vero a folliculo exemptis, major odoris " acrimonia, ut & ſaporis vehementia, quæ camphoram quodammodo ſapit." *Geoff.* ii. 374. They are much uſed by the Indians in food, as an agreeable ſpice; as well as in medicine, to help digeſtion, expel wind, &c. Vid. *R. H.* The Cardamomum majus and Grana paradiſi are thrown out of the *London M. M.* but Cardamomum minus is in no leſs than fifteen or ſixteen of the preſcriptions of that new diſpenſatory: and ſo accurate has the committee been as always to order the ſemina decorticata. " Oleo eſſentiali aromatico pollent " Cardamomi ſpecies, quod, aqua maceratæ, & poſtea diſtillatæ, copioſum " præbent." *Geoff.* ii. 371. He ſays the ſame of the Amomum, p. 374. " The tincture and diſtilled ſpirit are conſiderably more grateful than the in- " fuſion or diſtilled water: the watry infuſion appears turbid and mucilagi- " nous, the tincture made in ſpirit limpid and tranſparent." *New Diſpenſatory*, p. 107.

SECT. III.

The Grana paradiſi may be given in ſubſtance to ℈j: Cardamomum minus to ʒß: the other two to ℈ij. in ſubſtance: and to double theſe quantities in infuſion. Cardamomum minus is an ingredient in the aqua abſinthii compoſita, aqua mirabilis, tinctura rhæi dulcis, tinctura ſacra, tinctura ſalutifera, pulvis diaromaton, pulvis hieræ picræ, mithridatium, and theriaca: and the amomum is in the theriaca, and magma hedychroi alſo.

" Cardamomi doſis in ſubſtantia a ℈ß. ad ℈j. infuſum vero ad ʒß." *Geoff.* ii. 371.

CARDUUS. *Vide* p. 99.

CARDUUS MARIÆ.

SECT. I.

Carduus Mariæ. *offic.* Carduus albis maculis notatus vulgaris. *B. P.* 381. *T.* 440. *H. Ox.* iii. 155. Carduus leucographus. *Dod.* 722. Carduus marianus, ſive lacteis maculis notatus. *J. B.* iii. 52. Carduus Mariæ. *Ger.* 1149. *R. H.* 312. *Syn.* 195. Carduus Mariæ vulgaris. *Park.* 975. Carduus ſqua-

nis calycinis margine & apice ſpinoſis. *H. Cliff.* 393. Common Milk-Thiſtle, or Ladies-Thiſtle.—The ſeed is oblong, flattiſh and ſmooth, of different colours, containing an oily farinaceous and ſomewhat bitter white medulla.

It grows on banks, and borders of fields, &c. flowering in June the ſecond year. "Our lady's thiſtle is called of the Arabians bedoard, or bedeguar, as "Matth. Sylvaticus teſtifieth." *Ger.* 1150. "*Officin.* Semen imprimis; hinc "folia, & nonnunquam radix." *Schrod.* 556. "*Uſu.* Folia." *Dale* 105. "The leaves and ſeed are uſed." *Miller's Bot.* 115.

"Carduus lacteus, σίλυβον Dioſcoridi, l. 4. c. 159. Spina eſt lata, foliis "chamæleonti albo ſimilis. Plinio l. & c. 22. Silybum chamæleonti albo "ſimile æque ſpinoſum." *B. P. Dioſcorides*, l. c. p. 304. adds, "quæ adhuc "novella, cum oleo & ſale cocta, eſtur. Stillans e radice liquor drachmæ pon-"dere potus ex aqua mulſa, vomitiones ciet." Do theſe effects agree with thoſe of our C. M.?

SECT. II.

This ſeed is antacrid, ſomewhat nutritive, and (in emulſion, or decoction) diluent; called pectoral; and commended in the pleuriſy, rheumatiſm, &c. But it is never uſed with us.

"Pectoralis imprimis Carduus Mariæ cenſetur. Calfacit & ſiccat 2. ſub-"aſtringit, incidit, aperit: in cæteris æmulatur Carduum benedictum. Uſus "præcipue in pleuritide, ictero ac hydrope. Doſis ſeminis ad 3j. N. Semen "in emulſionibus crebri eſt uſus. *Præp.* aqua, ex herba tenella." *Schrod.* 556. "Antacida." *Boerh. Lib. de M. M.*

The ſeed is farinaceous and oily; the herb an olus molle, and, were it not for the prickles, would be more uſed as ſuch; for (as Dale ſays) culinaris potius quam medicinalis videtur. The quatuor aquæ pleuriticæ are, aqua Cardui Mariæ, Cardui benedicti, Dentis leonis, & Scabioſæ, *Ph. Aug.* p. 4. Are they better than aqua pluvia? "Folia tenera, demptis ſpinis, aliquando oleri-"bus non incommode addi, teſtis eſt Dodonæus. Echini intractabiles . . . cal-"loſa ſquammarum cartilago, dulcis veſca. Radix eſculenta." *J. B.* "Apud "nos in Anglia, frequenter in hortis feritur, ad acetaria & uſus culinæ." *R. H.*

"The leaves are bitter, aſtringent, and redden ſtrongly the blue paper: they "ſeem to contain a ſalt like the oxyſal diaphoreticum Ang. Salæ." *T. Hiſt.* p. 323. where the juice of the leaves, or emulſio ſeminum, is commended for the dropſy, rheumatiſm, pleuriſy, peripneumony, and ague; as it is by others in the jaundice, gravel, &c. "Lindanus (ſuper praxim Hartmanni) ſemen "ut ſpecificum adverſus hydrophobiam proponit: quod egregie ſudorem mo-"vet." *Geoff.* iii. 262. where you have an imagined analyſis, and imaginary principles.

CARTHAMUS.

SECT. I.

Carthamus, Cnicus. *offic.* Cnicus ſativus, ſive Carthamum officinarum, *B. P.* 378. *H. Ox.* iii. 145. Carthamus, ſive Cnicus, *J. B.* iii. 79. *Ger.* 1169.

R. H.

R. H. 302. *Syn.* 196. Cnicus, ſive Carthamus ſativus. *Park.* 259. Cnicus, ſive Carthamus. *Dod.* 362. Carthamus officinarum flore croceo. *T.* 457. Carthamus foliis ovatis, integris, margine aculeatis. *H. Cliff.* 394. Baſtard Saffron, or Safflower.

It grows, they ſay, in Egypt, particularly on the ſide of the Nile about Cairo. "In agris ſeritur." *R. Syn.* In gardens it flowers in July and Auguſt; but never ripens the ſeed here. The flowers are uſed in dying; and ſaffron is ſometimes adulterated with them: the ſeed only is uſed in medicine: it is white, cornered, oblong, and tapering, containing a white medulla, at firſt of a ſweetiſh taſte, then bitteriſh and nauſeous; without ſmell.

It is probably the κνικος *Dioſc.* l. 4. c. 190. p. 320; κνικος, or κνηκος *Theophraſti.* "Carthamum dicitur hodie voce a Mauritanis mutuata, qui Karten "vocant." Vid. *B. P.*

SECT. II.

It is cathartic, but operates diſagreeably; called a phlegmagogue; and commended in coughs, aſthmas, anaſarcas, &c. It has been given in emulſion to ʒj. but is now rarely uſed, in Britain at leaſt.

"Semen pituitam viſcoſam ac aquas vomitu ac dejectione purgat: confert "maxime pectori. Calfacit et ſiccat 1. ſtomacho adverſatur, ideoque corrigi- "tur ſtomachicis, aniſo, galanga, zingibere, &c. Doſis in ſubſtantia a ʒj. "ad ʒiiß; in infuſo a ʒij. ad vj. vel ultra. *Præp.* 1. Extractum Diacartha- "mi, ſeu Cnicopharmacum. 2. Syrupus de Carthamo. 3. Electuarium Dia- "cartham. 4. Species Diacarth." *Schrod.* 758.

It is of a nauſeous taſte, though neither acrid nor very bitter; was always reckoned cathartic; but hurtful to the ſtomach; and rarely given per ſe. Some birds eat it, and are ſaid to grow fat on it. "Pſittaci, quos vulgo vocamus "Papagalli, aviditſime Cnici ſemine veſcuntur, nec tamen eorum alvus exol- "vitur." *Matth.* p. 889. "Pſittaci, referente Matth. non ſolum innoxiè "ſemen Carthami eſitant, ſed et commode nutriuntur eo, et pingueſcunt." *R. H.* 302. "Cnicus (κνικος) alvum dejicit." *Hippoc. de diæta,* l. 2. p. 347. "Alvum potius quam urinam movet." *Ibid.* p. 360. "Cniſi flore in obso- "niis utuntur. Seminis vero contuſi et expreſſi ſuccus, ex hydromelite aut "gallinacei juſculo, alvum purgat, ſed ſtomacho adverſatur, &c." *Dioſcor.* l. 4. c. 190. p. 320. "Conſtat vero faſtidioſum eſſe medicamentum, con- "turbans viſcera, tardæque operationis." *Geoff.* ii. 464. N. B. His Rouge d'Eſpagne ſeems to be badly prepared, and can ſcarcely be called a fæcula. Vid. p. 465.

CARVI.

SECT. I.

Carvi, Carum. *offic.* Cuminum pratenſe. Carui officinarum. *B. P.* 158. Carum. *Dod.* 299. *H. Ox.* iii. 296. Carum ſive Careum. *Ger.* 1034. *R. H.* 446. *Syn.* 213. Carum vulgare. *Park.* 910. Caros. *J. B.* iii. 2, 69. Carvi. *Cæſ* 291. *T.* 306. Carum. *Fl. Lap.* 74. *H. Cliff.* 106. Caraway or Caroy.—This has a ſmall

a ſmall, oblong, ſtriated, brown ſeed; of a warm aromatic taſte, and fragrant ſmell.

" It grows in ſeveral places of Lincoln and Yorkſhires, according to Mr. " Ray. I have ſometimes found it in the fields about the town, but ſuſpect " it to ariſe from ſeed accidentally ſcattered. The greateſt part of the ſeed " uſed comes from Germany." *Miller's Bot.* 120. In our gardens it flowers in June, and plentifully ſows itſelf the ſecond year.

" Carui. Καρος Dioſcoridi, l. 3. c. 66: καρειον Aëtio: καρναδιον Simeoni " Sethi, de alim: Careum Plin. l. 19. c. 8. a Caria regione in qua lauda- " tiſſimum naſcitur." *B. P.* Carum ſemen eſt exiguum vulgaris notitiæ, " urinas ciet, excalfacit, ſtomacho utile, orique gratum; concoctionem ad- " juvat, ac utiliter antidotis & oxyporis admiſcetur: denique non parva illi " eſt cum aniſo convenientia. Eſt & cocta radix edulis æque ac paſtinacæ." *Dioſcor.* l. 3. c. 66. p. 200.

SECT. II.

It agrees in virtues with aniſe ſeed, and is uſed the ſame way, chiefly as carminative. The eſſential oil is pretty hot, and may be given to gut. iij. or iv. with ſugar. The ſemen confectum is common in confectioners ſhops. The root is eſculent.

" Calfacit & ſiccat 3. diſcutit, attenuat, ſtomachicum eſt ac diureticum, " lactis abundantiam præbet. Hinc uſus ejus inſignis in colica, vertigine, " &c. cum interne, tum externe applicatum. *Præp.* 1. Confectum ſemen. " 2. Condita radix, ſed raro. 3. Aqua ſtillat. ex planta integra. 4. Oleum, " ex ſemine ſicco deſtillatum." *Schrod.* 557.

It is a very oily aromatic, ſomewhat hot but not acrid to the taſte. " Se- " men ſapore acri & aromatico." *J. B. R. H.* " Saporis acris aromatici, " odoris fragrantis." *Herm. Cyn.* 279. *Dale* 125. " Saporis calidi aromatici, " ſpecifici, odoris fragrantis." *Nucl. Belg.* 64. It is not ſo pleaſant to me in- deed as the ſem. aniſi is, but generally liked, and even by children, at leaſt when confected, or made into bread. " It is of a warm aromatic pleaſant " taſte." *Miller*, l. c. " The herb alſo, and the root thereof, is better food " than the parſnep, and is pleaſant and comfortable to the ſtomach, helping " digeſtion." *Park.*

" The eſſential oil of Carvi is very acrid and very penetrating: it is ordered " to gut. v. or vj. in ol. amygdal. dulcium ʒv. or ʒvj." *T. Hiſt.* p. 254. " Oleum eſſentiale, aromaticum & exurens a gut. iij. ad vj. præſcribitur. " Semen pulveratum a ℈j. ad ʒj. uſurpatur, vel infuſum ʒj." *Geoff.* iii. 266. where ſee his imaginary analyſis; and the compoſition of the roſſolis des ſix graines. The ſemina quatuor calida majora are fœniculi Carvi, Cumini, Aniſi.

CICERA.

SECT. I.

1. Cicer, Cicer rubrum. *offic.* Cicer ſativum. *B. P.* 347. *T.* 389. *H. Ox.* ii. 75. *Ger.* 1222. *R. H.* 917. Cicer arietinum. *Dod.* 525. *J. B.* ii. 292.

Cicer ſativum ſive arietinum, rubrum, nigrum, vel album. *Park.* 1075. Cicer foliolis ſerratis. *H. Cliff.* 370. Chich-peas or Cicers:—Theſe are ſomewhat bigger than common peas, round, with a protuberance like a little horn at the eye, of different colours (white, red, or black) of a ſweet leguminous taſte like peas, and of no ſmell.

Where they grow wild is not known; but they are commonly ſown in the fields in France, Spain, Italy, &c. as they were of old, for their uſe in food, as peas are with us. Cicer, Græcè ἐρέβινθος, is not deſcribed by *Dioſcorides*, l. 2. 126. p. 129. though he mentions a ſativum, arietinum, and ſylveſtre. See there a ſuperſtitious cure for warts. *Theophraſtus*, l. 8. hiſt. c. 5. p. 937. has three kinds of it alſo. Vid. *Bod.*

2. Ervum, Orobus. *offic.* Orobus ſiliquis articulatis, ſemine majore. *B. P.* 346. Moſchus ſive Cicer ſativum. *Dod.* 524. Orobus ſive Ervum multis. *J. B.* iii. 321. Orobus receptus herbariorum. *Lob. Adv.* 400. *Ger.* 1225. Orobus vulgaris herbariorum. *Park.* 1078. Orobus ſativus ſive Ervum ſemine anguloſo, ſiliquis inter grana & grana junctis. *H. Ox.* ii. 74. Ervum verum Camerarii. *T.* 398. Ervum leguminibus pendulis. *H. Cliff.* 370. The Bitter Vetch—has round, whitiſh ſeeds, about the bigneſs of pepper, and taſting like Cicers or Peas. It grows about Montpelier, Geneva, &c. This cannot be the Orobus of the antients, though uſed for it, (vid. *Dioſc.* l. 2. c. 132. *Bod. in Theoph.* p. 923. col. 2.) ſince it is neither unpleaſant nor bitter, nor ſo acrid as to evacuate blood by urine or ſtool; neither do its ſeeds touch one another in the pods. Vid. *Theoph.* 8. hiſt. 5. p. 937.

3. Faba. *offic.* Faba. *B. P.* 338. *R. H.* 909. *Syn.* 323. Faba major hortenſis. *Ger.* 1209. *Park.* 1073. Faba ſativa. *Park.* par. 521. Faba cyamus leguminoſa. *J. B.* ii. 278. Faba major, ſive bona major Dodonæi. *H. Ox.* ii. 83. Bona, ſive phaſeolus major. *Dod.* 513. Faba, flore candido, lituris nigris conſpicuo. *B. B.* 338. *T.* 391. Vicia caule recto, petiolis abſque cirrhis. *H. Cliff.* 369. Garden Beans.

There are many varieties of it; but where any of them grow naturally is not known. "Creſcendi locus plantarum cultiſſimarum, ab omni ævo, "apud botanicos obſcurus fuit." *H. Cliff.* 369. It is κυαμος in Greek. Vid. *Dioſcor.* l. 2. c. 127. p. 130. "Faba inter legumina ſola potiſſimum erecto "caule conſtat." *Theoph.* l. 8. hiſt. c. 3. p. 914. Vid. & l. 7. c. 3. & l. 4. c. 2. ac Plin. l. 18. c. 7. p. 448. "Fabæ multiplex uſus omnium quadru-"pedum generi, præcipue homini." *Plin.* l. 18. c. 12. p. 458.

4. Fœnum Græcum. *offic.* Fœnum Græcum ſativum. *B. P.* 348. *T.* 409. *Park.* 1096. *H. Ox.* ii. 166. Fœnum Græcum. *Dod.* 536. *J. B.* ii. 363. fœnugræcum) *Ger.* 1196. *R. H.* 954. Medicago, leguminibus fere ſolitariis, ſeſſilibus, erectis, reflexo-falcatis, acuminatis. *H. Cliff.* 376. Fenugreek.—This has a ſmaller, quadrangular, yellowiſh-brown ſeed, with an oblique furrow in it, of a leguminous taſte and ſtrong ſmell.

The Fœnum Græcum ſylveſtre. *B. P.* Wild Fœnugreek, grows about Montpelier. Though the manured Fœnugreek is eaſily cultivated, and very fertile, yet the ſeed of it "comes from Germany." *Mil. Bot.* 202. "Fœnum "Græcum, τηλις Dioſcorid. l. 2. c. 124. Theoph. 3. hiſt. 17. cui & βακτρως 8. "hiſt. 8. κεραϊτης, & δικοκερως, Græcis; a ſiliquarum ſimilitudine: quare "Columella, l. 2. c. 11. ſimpliciter ſiliquam; Varro ſiliculam; Plinius, l. 18. "c. 16.

" c. 16. Siliciam, & l. 25. c. ult. Fœnugræcum vocavit." *B. P.* " Fœnu-
" græcum, ita enim in Collumellæ & Plinii codicibus ſcribitur, Græcis τηλις,
" &c." *R. H.* I do not find Fœnugræcum in Dalecamp's Pliny; but l. 25. c. ult. he has twice Fœnogræco, and thrice Fœnigræci, in one word, not Fœni Græci.

5. Lens, Lens vulgaris. *offic.* Lens vulgaris. *B. P.* 346. *T.* 390. Lens, *J. B.* ii. 317. *H. Ox.* ii. 59. *R. H.* 904. Lens minor. *Dod.* 526. *Ger.* 1224. *Park.* 1067. Cicer pedunculis biſloris, ſeminibus compreſſis. *H. Cliff.* 370. Common Lentils:—which have round, flat, browniſh-yellow ſeeds, of a leguminous taſte like the Cicers or common Peas.

" Lens vulgaris. *B. P.* ſparſim in ſatis conſpicitur." *Bot. Monſpel.* p. 152. An ſponte? " Seritur in agris Cantabrigienſibus, Huntingtonienſibus, &c. " ſola, & hordeo mixta." *R. Syn.* 323. It is not deſcribed by *Dioſcorides*, l. 2. c. 129. p. 131. It is φακος, in Greek, & ſometimes φακη in *Theoph.* Vid. *Bodæum in Theoph.* p. .

6. Lupinus. *offic.* Lupinus ſativus, flore albo. *B. P.* 347. *T.* 392. Lupinus ſativus. *Dod.* 529. *Lob.* 515. *Ger.* 1217. *R. H.* 906. L. ſativus, albus. *Park.* 1073. L. vulgaris, ſemine & flore albo, ſativus *J. B.* ii. 288. L. vulgaris ſeu ſativus albus. *H. Ox.* ii. 86. Lupinus caule compoſito. *H. Cliff.* 359. White Lupines—have pretty large, flat, roundiſh, white ſeeds, of a leguminous and bitter taſte.

Where it grows naturally I know not. *Dioſcorides*, l. 2. c. 132. p. 133. has a Lupinus (θερμος in Greek) ſativus, and c. 134. Lupinus ſylveſtris, but deſcribes neither. " Aqua ſi macerentur, amarorem exuunt. In Italia in " agris ſeruntur; non modo ad alimentorum uſum, ſed (ſi Matthiolo credi- " mus) ad agros impinguandos. Et Plinius pingueſcere hoc ſatu arva vineaſ- " que dixit, ita ut optimi ſimi vicem repreſentet." *R. H.* 907.

SECT. II.

They are all farinaceous, aceſcent, incraſſating, and nouriſhing; and hence antiſeptic. They are commended in many diſeaſes, but uſed more in food than in medicine inwardly. Outwardly (in cataplaſms) they are diſcutient, maturating, and deterſive; though Fœnugreek only is thus applied.

" Cicera calfaciunt & ſiccant 1. emolliunt, abſtergunt, diſcutiunt, diure- " tica ſunt ac lenientia; proin conducibile eſt eorum decoctum nephriticis. " Extrinſecus adhibetur farina in cataplaſmatis, &c." *Schrod.* 565. Qui Er- " vum non habet.

" Ervi ſemen, ob farinaceam mucaginem reſpondet Fœnugræco in emol- " liendis & maturandis abſceſſibus; ſed quoniam, more omnium leguminum, " gaudet ſale diuretico, ideo medetur urinæ (difficultate) & calculo pellendo." *Herm. Cyn.* p. 421.

" Fabarum farina emplaſtica eſt, refrigerat & ſiccat 1. incraſſat, extergit, " utilis intra corpus in diarrhœa, lienteria, &c. Extra in maculis ſole con- " tractis, aliiſque cutis ſordibus extergendis (ſi illa fricentur) in ſugillatis diſ- " cutiendis. *Præpar.* 1. Aqua, ex floribus. Diuretica eſt, maximique uſus " in maculis faciei extergendis, eaque fucanda. 2. Sal com. ex ſtramine in-

" cinerato. Summum diureticum eſt, uſitatiſſimumque in hydrope, calculo, " et urina retenta." *Schrod.* 589.

" Fœni Græci ſemen calfacit 2. ſiccat 1. emollit, digerit, maturat, diſcutit, " paregoricum eſt, uſuſque adeo famoſi ut cataplaſma dictarum intentionum " chirurgis vix uſitatum fuit, quin Fœnugræcum vel hujus mucilaginem con- " tineat; crebrique uſus eſt in clyſteribus emollientibus, mucilaginoſa quippe " ſua ſubſtantia obtundit acrimoniam, inteſtinaque eroſa oblinit. Inſuper " conducit ejus mucilago ad oculorum ſugillationes diſcutiendas (impoſita). *Præpar.* Mucilago. Extrahitur beneficio coctionis in aqua." *Schrod.* 591.

" Lens oculorum aciem obtundit, ægre concoquitur, ſtomacho incommoda " eſt, eumque & inteſtina inflat, alvum ſiſtit; ad nervos, pulmonem, & ca- " put incommoda eſt. Dioſc." *Dale* 219. " Lentes aſtringunt, incraſſant, " & nimium humorum motum ſedant." *Nucl. Belg.* 170. *Geoff.* iii. 701. ad 707. is de lente, of which about three are on the controverſy whether they are good in variolis & morbillis. Vid. *Hoffm.* 281. *Quot mira de lente!* *Schroder* has neither Lens nor Lupinus.

" Lupinus menſes & fœtum elicit, lumbricos pellit. Externe achōres, puſ- " tulas, pſoras, gangrænas, et ulcera maligna juvat." *Dale* 219. " In lum- " bricis præſertim ſi pueri laborent, cautiores nos faciat Aver. qui quinque " coll. 39. ait occidere. Quare non oportet intus dare, &c." *Hoffman* 320. § 10. Vid. *Sim. Paulli Q. B.* p. 78.

They all (as well as Piſa, Viciæ, Phaſeoli, and other legumina) conſiſt of a ſolid, farinaceous, ſomewhat oily ſubſtance; are flatulent, and of hard digeſtion for weak ſtomachs; but yield good nouriſhment and hearty food to the robuſt and laborious people accuſtomed to much muſcular motion. But while young and green (I mean ſuch as are commonly eaten every where) they abound with a ſaline, as it were ſaccharine, diluent juice, and are eaſy of digeſtion. The farina of any of them may be uſed in diſcutient as well as ſuppurating cataplaſms; though the Fœnugræcum, being the moſt viſcid, is moſt commonly preferred to the reſt, and applied only externally. The Lupines are ſaid to kill and expel worms, not only taken inwardly, but even outwardly applied: and the ſame virtue is attributed to the Cicers, which are made deobſtruent, yea and lithontriptic by the antients. *Credat qui vult.* Fœnum Græcum only is retained in the *New London M. M.* and really only in uſe in Britain. A ſal fixum is ordered to be made of Bean-ſtalks in *our Pharmacop.* but I believe it is ſeldom done; nor is it worth the pains, if they afford ſo ſmall a quantity of it as Mr. *Geoffroy*'s analyſis aſſigns. viz. fol. et ſtipit. recentium ℔v. ſalis fixi alcali ʒj. gr. l. which, however, is gr. xxx. more than the ſame quantity of green brakes yield. Vid. *Geoff.* iii. p. 459. et 474; who gives the analyſis Fabarum et recentium, et exſiccatarum. *Ib.* p. 459; Fœni Græci, p. 485; lentiumque, p. 703. His analyſis Cicerum I take to be conjectured, as are the principles of the Lupines. Vid. p. 318. et 753.

Secundum D. Geoffroy, l. c. analyſi chymica præbuerunt ℔v. exſiccatorum ſeminum.

	Fabæ.				Fænigræci.				Lentis.			
	lb.	℥.	ʒ.	gr.	lb.	℥.	ʒ.	gr.	lb.	℥.	ʒ.	gr.
Humorum	2	03	4	32	1	13	5	11	2	04	2	00
Sal. v. urin.	0	01	0	64	0	00	1	28	0	00	0	00
Olei	0	05	6	48	1	01	1	31	0	07	4	00
Carbonis	1	04	4	32	1	03	4	48	1	05	7	00
Jacturæ	0	15	7	40	0	12	3	26	0	14	3	00
Cinerum	0	02	1	56	0	03	0	12	0	01	7	00
Sal. alcali	0	01	1	32	0	00	6	07	0	00	5	00
Terræ	0	01	0	24	0	02	2	05	0	01	2	00

There is ʒj. wanting to make up the ſum in the Lentils only. N. B. The ſal volatile & oleum, & terra. Nihil omnino explicat G. imo potius confundit omnia: e. gr. p. 461. fenugreek is in the decoctum emolliens pro fotu; & farina orobi (vel tritici) in the trochiſci ſcillitici.

LECTURE LXIX.

CITRULLUS, &c.

SECT. I.

1. Citrullus. *off.* Anguria, Citrullus dicta. *B. P.* 312. *T.* 106. *R. H.* 643. Anguria. *Matth.* 396. *H. Lugd.* 625. *H. Ox.* ii. 28. Anguria, Cucumus, Citrullus. *Dod.* 664. Anguria ſive Citrullus vulgatior. *Park.* 771. Citrullus officinarum. *Lob.* 304. *Ger.* 913. Citrullus folio colocynthidis ſecto, ſemine nigro, quibuſdam Anguria. *J. B.* ii. 235. Cucurbita, ſeminum margine baſi dilatato. *H. Cliff.* 452. (At Cucumis ſpecies eſt ſecundum *Lin. G. Pl.* edit. 2. p. 467.) Water Melon, or Citruls.—Theſe have flat, oval, margined ſeeds, more pointed at one end than at the other, of different colours, commonly black or red, containing a white kernel.

It grows in Naples, Sicily, Jamaica, &c. "Anguriæ voce primum Aëtium uſum eſſe volunt: alias Citrullus, a citreo colore dicitur. Peponem "Dioſcoridis, Galeni, & Plinii; & Arabum Battecha eſſe volunt." *B. P.* vid. *N. Myrepſ.* 367. and *Hoffm.* 208.

2. Cucumis, Cucumis hortenſis. *off.* Cucumis ſativus vulgaris, *B. P.* 310. *T.* 104. *H. Ox.* ii. 31. Cucumis vulgaris. *Dod.* 662. *Ger.* 910. *R. H.* 645. C. ſativus. *Park.* 772. C. vulgaris, viridis & albus. *J. B.* ii. 245. Citreolus vulgò. *Cæſ.* 199. Cucumis foliorum angulis rectis. *H. Cliff.* 451. Common Cucumber.—The ſeeds are longiſh, oval, flat, pointed at both ends, and of a white or ſtraw colour.

Where it grows wild, and whether it was known to the ancients, I know not. vid. *Hoffm.* p. 204. "Etſi σικυος nomen apud Græcos (quemadmodum "Cucumeris apud Latinos) generale ſit nomen omnium horariorum fructuum, "*viz.* Peponum, Melonum, Cucumerum, Anguriarum, &c ejuſdem generis;

" attamen σικυς ἡμερος Dioſcoridis, l. 2. c. 163. & Theoph. 1. hiſt. 18. aliis " σικυον & κικυον, Cucumer Plinio, l. 19. c. 5. Cucumis Varroni, a curvore " quaſi curvimer, dicitur." *B. P.*

3. Cucurbita. *offic.* Cucurbita lagenaria flore albo, folio molli. *B. P.* 313. *H. Ox.* ii. 23. Cucurbita lagenaria. *J. B.* ii. 216. *T.* 107. *Ger.* 923. *R. H.* 638. Cucurbita lagenaria major. *Park.* 769. Cucurbita, ſeminibus obſolete bicornibus, *H. Cliff.* 451. The Gourd, or Bottle Gourd—has pretty large, longiſh ſeeds, pointed at one end, two-horned at the other, flatted and ſtriated, of a light-brown colour.

This grows in America, and ſometimes to a vaſt bigneſs. " Cucurbita, " κολοκυνθα ἐδώδιμος, Dioſcoridi, l. 2. c. 162. (p. 144.) ad differentiam κολο- " κυνθιδος, dicitur: Latinis Cucurbita a concurvatu, quod facile ſi quid ob- " ſtiterit, quo minus extendatur, incurvatur: Calabaſſi ſeu Cucurbitæ in India " ad miraculum uſque augeſcunt. Species prope infinitæ ſunt, &c." *B. P.*

4. Melo. *offic.* Melo vulgaris. *B. P.* 310. *T.* 104. *H. Ox.* ii. 29. Melo, ſive Melopepo vulgo, Cucumis Galeni. *Dod.* 663. Melones. *J. B.* ii. 242. Melo. *Ger.* 910. *R. H.* 644. *Park.* par. 525. Melopepo. *Lugd.* 623. Cucumis, foliorum angulis rotundatis. *H. Cliff.* 451. The Muſk-Melon.—The ſeeds of this are like thoſe of the cucumber, except that they are ſomewhat larger, and not ſo ſharp pointed.

Does it grow in Egypt? " Hoc genus Palladius Melones, quaſi μηλωνας, " *i. e.* Pomeos, a malorum figura appellavit; quod nomen adhuc in uſu eſt. " At Melon Theophraſto Sycion; Plinio, Cucumis Mali cotonei effigie; Me- " lopepo Galeni: forte Cucumis Antiquorum." *B. P.* " Melo vulgi, ſive " Cucumis Antiquorum, Dioſcoridis Melopepo. *Lob. Adv.* 285. " Varieta- " tum hujus apud hortulanos infinita farrago." *H. Cliff.*

5. Pepo. *offic.* Pepo oblongus. *B. P.* 311. *T.* 105. *H. Cliff.* ii. 26. *R. H.* 641. Pepo major oblongus. *Dod.* 665. Pepo maximus oblongus. *Ger.* 919. Pepo. *Park.* par. 526. Cucurbita margine integro tumido. *H. Cliff.* 452. Common Pumpion, or Pompkin—which has pretty large, flat, oval ſeeds, pointed at both ends and margined, and of a white or yellowiſh colour.

Where it grows naturally is not known. " Pepo, πεπων, Dioſcoridi, l. 2. " c. 164. (p. 145.) Plinius, l. 19. c. 5. (p. 495.) ſcribit, Cucumeres cum " magnitudine exceſſerunt, Pepones vocari." *B. P.* " Ego certe cum in " Italia peregrinarer miratus ſum Italos Cucumerem Citrullum appellare; Me- " lones autem aquaticos & Pepones, Cucumeres." *R. H.* 644.—Theſe ſeeds are commonly kept mixed in the ſhops; and, though five in number, are commonly called ſemina quatuor frigida majora, *viz.* Citrullus, Cucumis, Cucurbita, deinde Melonum; either the Melon or Pumpkin ſeed being taken for the laſt, or both. N. B. *Dioſcorides* has περι πεπονος, and σαρξ πεπονος, not πεπωνος. And *Homer* Ὦ πεπονες κακ' ἐλεγχε', Ἀχαϊδες, οὐκ ετ' Ἀχαιοι. *Il.* B. v. 325.

SECT. II.

In emulſions theſe ſeeds are diluent, antacrid, and diuretic; but not ſo nouriſhing as almond-milk; yet more cooling; and of great uſe in heat of urine, gravel, acute and inflammatory fevers, &c. The fruits themſelves may be of uſe in hot conſtitutions and climates.

" Citrulli (vel) Anguriæ ſemen eſt ex quatuor ſem. frig. majoribus; refri-
" gerat itaque & humectat ad gr. ij; eſt diureticum, aperiens, acrimoniam
" obtundens. Inſervit præcipue renibus ac veſicæ abſtergendis, bilis ac ſan-
guinis æſtui compeſcendo." *Schrod.* 569.

" Cucumeris ſemen (ſeu nuclei) refrigerat & ſiccat (præcipue ſi aridum ſit,
" alias humectat) in fine gr. i. abſtergit, aperit, urinam ducit, uſuſque cre-
" berrimi eſt in emulſionibus antipleuriticis, antiphreniticis & ſimilibus.
" Ipſa Cucumerum ſubſtantia, refrigerat & humectat. Excrementitii eſt ſucci,
" adeoque non niſi robuſtioribus ventriculis edendus, idque non ſine corrigen-
" tibus condimentis, *v. g.* pipere & ſim. *Præp.* Condit. fructus cum ſale com-
" muni." *Schrod.* p. 576.

Officin. " Cucurbitæ ſemen & nonnunquam folia. Cucurbita convenit viri-
" bus cum Cucumere, tam in qualitatibus carnis, quem in ſeminis facultatibus.
" Folia recentia puerperarum mammis adhibita, monente Matthiolo, lac im-
" minuunt. *Præp.* aqua ſtillat. ex fructu immaturo; fert opem omnibus in-
" flammationibus externis, oculorum, aurium, podagricis, &c. Intrinſecus
" quoque mirabiliter æſtum corporis mitigat. N. Succus expreſſus idem facit."
Schrod. p. 576.

" Melonis fructus, ſeu pulpa, refrigerat & humectat, nutrimenti eſt mali,
" putreſcibilis, febribus ac torminibus generandis apti. N. minus nocet coc-
" tus, potuque vini & pipere correctus. Semen aperit & abſtergit, epa-
" ticum eſt ac nephriticum, eapropter confert tuſſi, phthiſi & febribus;
" medetur ſtranguriæ, ardorem urinæ, ſitimque ſedat, &c. Cum reliquis
" ſem. frig. maj. in omnibus convenit. *Præp.* Melones conditi." *Schrod.*
p. 623. N. B. " Matthiolus majores vocat Pepones, minores Melopepones."
Ibidem.

The kernels of all theſe ſeeds are farinaceous, oily, of an agreeably ſweet taſte, and make a very pleaſant emulſion. The fruits are not proper for weak ſtomachs; and generally require ſomething to correct their coldneſs, and promote their being digeſted. They are as generally owned to afford no good nouriſhment; but rather to weaken than ſtrengthen nature. *An a ſale eſſentiale nitroſo?* Hence they ſeem to be more cooling than almonds. They are all however baniſhed the *London M. M.*—They keep well. Melon ſeed is reckoned the better for ſowing, the older it is: and when forty-two years old is ſaid to have ſprung up and proſpered well. vid. *Phil. Tranſ.* N°. 464. p. 115, or *Abridg.* vol. viii. part 2. p. 824. I do not know how long they continue good.

" Analyſi chymica ex ſeminum Cucurbitæ a cortice mundatorum ℔v. pro-
" dierunt humorum ℥xvij. ʒj. gr. xliv; olei ℔ij. ℥v: maſſa relicta pendebat
" ℥xij. gr. xviij; unde calcinatione fuerunt maſſæ nigræ ℥v. ʒiij. gr. liv, ac
" inde ſalis fixi leviter alcali gr. xv. (ergo terræ nigræ ℥v. ʒiij. gr. xxxix.)
" jactura fuit ℥xiij. ʒvj. gr. x. Ammoniacalem ſalem continent . . Caro ſto-
" machum relaxat, & omne bibendi deſiderium reſtinguit." *Geoff.* iii. 381.
" Cucurbita ſtrim ſedat, urinam ciet & ventrem movet, ſemen genitale minuit,
" & Veneris appetentiam extinguit." *R. H.*

" Analyſi chymica ex carnis Citrulli ℔v. prodierunt humorum ℔iv. ℥xiv.
" ʒiv. gr. xij; olei ʒiß. Carbonis fuerunt ʒvij. gr. lxij; unde cinerum ʒiv.
" gr. xij, ac inde ſalis fixi alcali ʒij. gr. xxvj. (ergo terræ ʒj. gr. lviij.) Jactura
fuit

"fuit ʒj. gr. xxxiv. Sal eſſentiale tartareum & ammoniacale continet." *Geoff.* iii. 340.

"Analyſi chymica ex Cucumeris fructus nondum bene maturi ℔v. prodie-
" runt humorum ℔iv. ʒxiv. ʒij. gr. xxx; olei ʒij. gr. xviij.—Carbo pende-
" bat ʒj. ʒiij. gr. xxiv, unde cinerum ʒvj. gr. xlviij; ac inde ſalis fixi alcali
" ʒiiß. (ergo terræ ʒiv. gr. xij.) Jactura fuit nulla. Salem eſſentialem obtinet
" tartareum parcum." *Geoff.* iii. 373. who is prolix enough on the different ways of dreſſing and eating cucumbers.

Dodonæus thinks Cucumbers more eaſily digeſted than Melons. *J. B.* is of a contrary opinion. Mr. Ray agrees with Dodonæus, and ſtands up an advocate for cucumbers. vid. *R. H.* 645 and 646. Neither of them agrees with every ſtomach.

CORIANDRUM.

SECT. I.

Coriandrum. *offic.* Coriandrum majus. *B. P.* 158. *T.* 316. *H. Ox.* iii. 269. Coriandrum. *Dod.* 302. *Lob.* 403. *J. B.* iii. 2, 89. *Ger.* 1012. *R. H.* 470. *Syn.* 221. Coriandrum vulgare. *Park.* 918. Coriandrum fructibus globoſis. *H. Cliff.* 100. Common Coriander—which produces round ſpherical (or hemiſpherical and concave) ſtriated ſeeds, of a yellowiſh-gray colour, a warm ſweetiſh aromatic taſte, and fragrant ſmell.

It grows in France and Spain, &c. In gardens it ſows itſelf plentifully, flowering in June. It is κορίον, or κοριαννον, in Dioſcor. l. 3. c. 71. p. 202, who does not deſcribe it. It was probably ſo called from κορις cimex, becauſe the green herb, ſeed and all, ſtinks intolerably of bugs. It is κορνανον and κοριαννον in *Theophraſtus* 7. hiſt. 1. & 4. cauſ. 3; Coriandrum *Plinio*, l. 20. c. 20. p. 533.

SECT. II.

It is a diaphoretic and carminative aromatic; ſaid to be ſtomachic; and is commended for weak and windy ſtomachs, vertigoes, &c. and as a corrector of griping purgatives.

" Stomachicum imprimis eſt, calfacit & ſiccat ad gr. iij. aſtringit. Hinc
" celeberrimum in laxitate ſtomachi, ſi poſt cibum aſſumatur; claudit enim
" ventriculum, exhalationeſque ſupprimit, quo minus caput gravent, ructuſ-
" que producant. *Præp.* 1. Præparatum ſemen. Maceratur per noctem in
" aceto, dein exiccatur. 2. Confectio ex ſemine præparato. 3. Aqua ſtillat.
" rari uſus. 4. Oleum." *Schrod.* 571. Vid. *Galen de Simpl. fac.* l. 7. p. 52. C.

1. Though the green ſeed is abominably fetid; yet, when ripe and dried, it is a warm aromatic, and ſmells agreeably. Vim habet refrigeratoriam, ſays *Dioſcorides*; ſed perperam, adds *Galen*. *Simeon Sethi* agrees with Galen; as does *Avicenna* with Dioſcorides. Vid. *Matth.* p. 558. — 2. *Dioſcorides* (Alexipharm. c. 9.) ſays alſo, " Si largius ſumptum fuerit ſemen, mentem, non ſine
" periculo, e ſua ſede & ſtatu demovet:" l. c. and elſewhere. " Coriandrum

" propter

" propter odorem latere non poteſt: epotum vocis raucitatem facit, atque in-
" ſaniam, qualis ex vinolentia proficiſcitur, ita ut qui ſumpſere varia dictu
" pudenda blatterent: tota vero corpore Coriandri odor ſeſe prodit." Yet the green herb is much uſed in Egypt; " Etenim ferculum non parant ſine
" foliis Coriandri, quanquam ingratè oleat." *Alpin. de Pl. Ægypti.* p. 131. It is eaten alſo in Spain, and reckoned a cordial." " At Hiſpani, autore *Amato*,
" frequentiſſime illo utuntur, & pro cordiali habent. Verum ut experientia
" docuit monachos in Meſu: propter hunc uſum Hiſpanorum plurimos eſſe
" fatuos, ob quorum curam tam frequentia ſunt hoſpitalia. Ita in Ægypto
" eſſe poteſt, licet Alpinus non obſervarit." *Hoffm.* p. 193. vid. *Bod. in Theoph.* p. 747. But whatever is in this, the ſeed is innocent, needs no preparation, and is uſed like the ſem. quatuor calida majora. " Oleum eſſentiale tenue,
" odorum & aromaticum, analyſi chymica ſuppeditat, cum phlegmate acido,
" & aliqua ſpiritus urinoſi portione." *Geoff.* iii. 358. *But who analyſed it?*

CUCUMER. *Vide* p. 346.
CUCURBITA. *Vide* p. 347.

CUMINUM.

SECT. I.

Cuminum. *offic.* Cuminum ſemine longiore. *B. P.* 146. Cuminum. *Lob.* 428. *M. U.* 4. *H. Ox.* iii. 271. Cuminum ſive Cyminum ſativum. *J. B.* iii. 2, 22. *R. H.* 433. Cuminum ſativum Dioſcoridis. *Ger.* 1066. Cuminum vulgare. *Park.* 887. Fœniculum orientale, Cuminum dictum. *T.* 312. Cummin ſeed. *R. H.*—Cummin has an oblong, ſtriated, greeniſh or grayiſh brown ſeed, ſomewhat bigger than fennel ſeed, of a warm, bitteriſh, aromatic taſte, and ſtrongly fragrant ſmell.

" I know not where it grows wild; but it is cultivated in many countries, particularly in Malta and Sicily, " from whence we had the ſeeds." *Miller's Bot.* 164. " I have had ripe ſeed from it in the garden ſeveral times. *Miller's Dict.*

" Κυμινον, Dioſcoridi, l. 3. c. 68. Theoph. 7. hiſt. 4: at Plinio Cuminum,
" l. 19. c. 8. & l. 20. c. 14 & 15. *B. P.* But whether this be the ſame with
" our Cummin, I cannot determine. vid. *Bod. in Theoph.* p. 752. " Cumi-
" num ſativum ſtomacho eſt utile, ſed multo magis Æthiopicum quod Hip-
" pocrates regium appellavit. Secundum locum tenet Ægyptium: mox reli-
" qua ſequuntur, &c." *Dioſcor.* l. 3. c. 68. p. 201. vid. *Ammi.*

SECT. II.

It is ſomewhat ſtronger than fennel or carvi ſeeds; called ſtomachic; and commended internally for wind in the bowels, vertigo, &c. and outwardly as diſcutient and anodyne, for ſwellings, ſtitches, fixed pains, pains after childbirth, &c. in clyſters, epithems, and plaiſters.

" Cal-

" Calfacit & ficcat 3. attenuat, digerit, reſolvit, flatus diſcutit, utile in " colica, tympanite, vertigine. *Præp.* 1. Aqua, ex ſemine. 2. Oleum ſtil- " lat. 3. Species Diacumino." *Schrod.* 577.

It is ſubacrid, oily, and ſtrongly aromatic; and one of the greater hot ſeeds. " Semen guſtu ſubamaro, tenui, mediocriter acri, & cum gravitate ſuaviter " odorato." *J. B. R. H.* " Odoris aromatici nonnihil ingrati, ſaporis ſub- " amari aromatici." *Nucl. Belg.* 95. " Saporis ſubamari, aromatici, acris, " ingrati; odoris admodum gravis & vehementis, non inſuavis, columbis " maxime grati." *Geoff.* iii. 383. " Analyſi chymica plurimum præbet olei, " phlegmatis tum acidi tum urinoſi. Salem igitur eſſentialem obtinet ammo- " niacalem, oleoſum, aromaticum." *Ibid.* Alia conjectura! It may be given in ſubſtance to ʒj; in infuſion to ʒij. and upwards; the oil to gut. x. but ſel- dom above gut. iij. Cummin is in the emplaſtrum anodynum, emplaſtrum antihyſtericum; and there is an empl. e Cymino in the *New Lond. Pharmaco- pœia.*

" Quæritur, an quod Cumino tribuerit Dioſcorides faciem & corpus deco- " lorandi, fiat peculiari & occulta proprietate? Videtur quibuſdam. Nam " Hippocrates 2. hum. 34. ſcribit, & videntibus & olfacientibus obeſſe. Et " Galen, ibi ait diſerte, facere impalleſcere corpus. Et Dioſcorides, cutis " colore bibitum illitumve mutat in pallorem. Sed tollunt litem Avic. & " Serap. nimium uſum id facere. Quia enim vehementer diſcutit, & con- " ſequenter ſiccat, foris quidem abſumit id ſanguinis, quod floridam faciebat " cutim: intus autem mutat ſanguinem in bilem." *Hoffman*, p. 210. An extraordinary query, and as extraordinary an anſwer!

DAUCUS.

SECT. I.

1. Daucus, Daucus vulgaris. *offic.* Paſtinaca tenuifolia, ſylveſtris Dioſcori- dis, vel Daucus officinarum. *B. P.* 151. *M. U.* 31. *H. Ox.* iii. 305. Paſtinaca ſylveſtris tenuifolia. *Dod.* 675. *Ger.* 1028. *Park.* 901. Paſtinaca ſylveſtris, ſive ſtaphylinus Græcorum. *J. B.* iii. 2, 62. *R. H.* 465. Daucus vulgaris. *Cluſ. H.* ii. 198. *T.* 307. *R. Syn.* 218. Daucus ſeminibus hiſpidis. *H. Cliff.* p. 89. Wild Carrot, or Bird's neſt.—This bears ſmall, roundiſh, briſtly, grayiſh ſeeds, of a warm aromatic taſte, and not unpleaſant ſmell.

It is common in paſture grounds, and among corn, flowering in June and July. " Paſtinaca ſylveſtris (σταφυλινος ἀγριος) folia habet gingidii, at la- " tiora & ſubamara, caulem rectum, ſcabrum; umbellam ſimilem anethi, in " qua flores inſunt candidi, ac in medio exiguum quiddam colore purpureo, " & fere ad croceum inclinante. Radix eſt digiti craſſitudine dodrantalis, " odorata, & ſi decoquatur eſculenta.... Hortenſis vero Paſtinaca cibo aptior." *Dioſcor.* l. 3. c. 59. p. 198. *An Daucus noſtras?*

2. Daucus Creticus. *offic.* Daucus foliis fœniculi tenuiſſimis. *B. P.* 150. Daucus Creticus ſemine hirſuto. *J. B.* iii. 2, 56. *R. H.* 463. Daucus Creten- ſis. *Lob.* 416. Daucus Cretenſis verus, *Ger.* 1029. Daucus Creticus verus Dioſcoridis. *Park.* 896. Myrrhis annua, ſemine ſtriato villoſo incano. *M. U.* 67. *T.* 315.

T. 315. Myrrhis tenuifolia annua Cretica, ſemine lanugine alba pubeſcente. *H. Ox.* iii. 302. Athamanta foliis capillaribus, ſeminibus hirſutis. *H. Cliff.* 93. Candy Carrots.—The ſeeds are oblong, ſlender, hoary, and hairy; of an acrid aromatic taſte, and agreeable but not fragrant ſmell.

It grows in Germany, Crete, &c. "Variat foliis et tota planta hirſuta "ac glabra, obſervante *J. B.* Noſtra glabra eſt." *H. Cliff.* 93. vid. *B. J.* 69. N°. 9. & 11. "Daucum aliqui διρκαιον vocant. Ac Creticum qui-"dem foliis eſt fœniculi ſimilitudine, at minoribus atque tenuioribus, caule "dodrantali, umbella coriandri, floribus candidis: atque inter hos, ſemine "acri, albo, hirſuto, ac ſuavis in mandendo odoris. Radix eſt digitali craſ-"ſitudine, & dodrantalis longitudine. In ſaxoſis apricisque locis provenit." *Dioſcor.* l. 3. c. 83. p. 206.

SECT. II.

They are attenuant, diuretic, and carminative; called uterine; and commended in female obſtructions, flatulent and nephritic colics, ſtrangury, ſtone, hickup, &c. agreeing in virtues with Ammi, when uſed in the ſame manner. The D. Cretic. is in the Mithridatium et Theriaca.

"Dauci Cretici ſemen uterinum imprimis eſt, & diureticum; calfacit & "ſiccat 2. aperit, incidit, flatus diſcutit. *Uſus præcip.* in menſibus obſtructis, "ſuffocatione & dolore matricis, in colica flatulenta, in ſingultu, dyſenteria, "tuſſi chronica. *Schrod.* p. 582.

"Paſtinaca ſylveſtris eiſdem prædita eſt viribus quibus Daucus Creticus, "cujus quoque loco in compoſitionibus commode adhiberi poteſt. Semen "calfacit & ſiccat 3. radix paulo imbecillius; herba adhuc minus: attenuat, "aperit. *Uſus præcipui* in tuſſi, pleuriſi, ſtranguria; reſarat epar, lienem, "ureteres; ciet menſes & molas, ſedat matricis ſuffocationes; ſtimulat Vene-"rem. Extrinſecus convenit radix peſſariis; exiccat herba catarrhos (in lo-"tionibus capitis) parturientium partum promovet (in ſuffitu). *Præp.* 1. Con-"fectum ſemen. 2. Aqua ſtillatitia, ex tota herba cum floribus, ac radicibus, "Julio collecta. 3. Oleum ſtillat. ex ſemine." *Schrod.* p. 664.

They are oily and aromatic, and one of the ſem. calida minora: and moſtly uſed as a diuretic and carminative. "Memini Conſiliarii, cujus ante de eſu "aſparagi mentionem feci. Is enim cum per quindenas ſingulas ſoleret miſere "decumbere; uſus deinceps cerviſia, cui ſemen Dauci incoctum eſt, liber a "lithiaſi vixit modo per aliquot annos." *Helmont. Lith.* c. 7. § 14. p. 46. "In monaſterio rubeo Zoniæ, prope Bruxellam, ac templi ſacrario, ſpirant "fontes aliquot, ſaxa qui parieti apponuntur; contra adagium, *Gutta cavat* "*lapidem ſæpe cadendo.* Unco namque & ſecuri frequenter ſaxa adnata decu-"tiunt. Monachi autem queruntur, ſe ſtrophos ſive tormina pati, niſi ſemine "Dauci, cerviſiis incocto, utantur quotidie. Quatenus odor ſeminis Dauci, "odorem ſaxatilem domat & comprimit." *Ibid.* c. 1. § 19. p. 6.

The red flowers in the middle of the umbella are commended for the epilepſy. Vid. *J. B.* and *R. H.*

The Daucus Creticus is in the Mithridatium & Theriaca; and Daucus vulgaris in the aqua petroſelini compoſita. "Dauci Cretici ſemen acre, aroma-

"ticum."

" ticum." *R. H.* " Saporis calidi, aromatici; ſicut & odoris. *Nucl. Belg.* 101. " Saporis acris aromatici; odoris debilis." *Geoff.* iii. 397. " Dauci vulgaris " ſemen ſaporis ſubamari, acris; odoris aromatici." *Nucl. Belg.* 101. " Sa- " poris Dauco Cretico debilioris, odoris fragrantis."

E R U C A.

S E C T. I.

Eruca. *offic.* Eruca latifolia alba ſativa Dioſcoridis. *B. P.* 98. *T.* 227. Eruca ſativa. *Dod.* 708. *Ger.* 246. *Park.* par. 502. Eruca major ſativa annua, flore albo ſtriato. *J. B.* ii. 859. *H. Ox.* ii. 228. *R. H.* 806. Eruca ſativa alba. *Park.* 816. Siſymbrium foliis pinnatifidis, laciniis exterioribus majoribus, caule hirſuto. *H. Cliff.* 337. Garden Rocket.—This has a ſmall, ſomewhat oval, and flattiſh ſeed, rather leſs than turnep ſeed, of a reddiſh-yellow, or dark-gray colour; the ſeminal plant of which is viſible through the thin ſkin, or membrane, which covers it, with its radicle: of a hot, biting, bitteriſh taſte; with a peculiar flavour, and fœtid ſmell.

I know not where it grows wild. Sown in gardens it flowers in June, and ſooner when it ſows itſelf. I obſerved in Holland the druggiſts kept ſometimes ſinapi album, ſometimes ſemen eryſimi, and ſometimes ſophiæ chirurgorum as I remember, for it. " Semen in ſiliquis oblongis, rapi ac napi ſimile." *Dod.* " Semina flava, majora quam ſinapi, minus etiam rotunda." *J. B. R. H. Geoff.*

" Eruca, quod vellicando linguam quaſi erodat." *B. P.* Εὔζωμον. *Theoph.* hiſt. l. 1. c. 9. p. 11. & *Dioſcor.* l. 2. c. 170. p. 146. " In condiendis ob- " ſoniis tanta eſt ſuavitas, ut Græci euzomon appellaverint." *Plin.* l. 20. c. 13. p. 523: for ζωμος is jus. " Odor hujus plantæ validus & ingratus, ne dicam " fœtidus, nec minus ſapor, quamvis Itali eo delectentur, & acetariis, guſtus " gratia Erucam perpetuo admiſcent: forte tamen viribus potius quam ſapore " ſe illis commendat initio, & poſtea uſu frequenti, palato etiam ſe conciliat." *R. H.* 806. " Itali etiam nunc dierum acetariis Erucæ tantillum admiſcent, " ejuſque guſtu mirifice delectantur." *R. H.* ibid. vid. *Bod. in Theoph.* p. 748.

" Cruda Eruca coitum largiore cibo concitat: ac ipſius quoque ſemen ejuſ- " dem eſt effectus. Urinas movet, concoctionem juvat, alvoque eſt accom- " modata. Semine in condiendis obſoniis utuntur: quod uti diutius peren- " net, aceto lacteve ſubactum in paſtillos digerunt, atque ita reponunt. Naſ- " citur & ſylveſtris Eruca maxime in Iberia quæ occidentem ſpectat, ac ipſius " ſemine loci illius incolæ pro ſinapi utuntur. Eſt porro quam ſativa ad " movendam urinam efficacior & multo acrior." *Dioſcor.* l. c.

S E C T. II.

It is an acrid, antacid, detergent diuretic; called aphroditic, and uterine; and is commended inwardly for the ſcurvy, green-ſickneſs, dropſy; and outwardly as an errhine, apophlegmatiſm, & attrahent.

" Semen calfacit & ſiccat intenſe 3. *Uſus præcip.* in venere ſtimulanda, " apoplexia præſervanda. Extrinſecus (impoſita radix) extrahit officula fiſſa, " pituitam e cerebro prolicit (in apophlegmatiſmis.)" *Schrod.* 586.

It is acrid, bitteriſh, ſtrongly odoriferous, or rather fœtid; loſes much by drying or decocting like the other acria volatilia; though the ſeed keeps pretty well: it alſo inflames the ſkin. " Saporis eſt acerrimi & ſubamari, odoris " gravis & urinoſi." *Nucl. Belg.* 107. However much it may pleaſe an Italian palate, it is diſtaſteful to every body here, and never uſed. " Semen " Erucæ uſurpatur in electuario de ſatyrio; & in tabellis magnanimitatis *Ph. Reg. Geoff.* iii. 440; who gives the analyſis of the Eruca (ſylveſtris major lutea, caule aſpero. *B. P. E.*) tenuifolia, perennis, flore luteo. *J. B.* ii. 861. *T.* 227. and makes it ſtronger than the ſativa; " odorem refert oleorum fœtidorum " ſuper calcem vivam rectificatorum.———Saporis eſt acris, urentis, cum " quadam amaritudine in receſſu. Erucæ ſativæ odor & ſapor remiſſiores ſunt, " ſicut & virtus debilior." *Geoff.* iii. 437. & 438. & *R. H.* 807. The doſe is not determined. It is an ingredient in the aq. antiſcorbutica of the *Paris Diſpenſatory*, p. 199.

HORDEUM.

SECT. I.

Hordeum. *offic.* Hordeum diſtichon, quod ſpica binos ordines habeat Plinio. *B. P.* 23. *T.* 513. Hordeum diſtichum. *B. Theat.* 440. *J. B.* ii. 429. *R. H.* 1243. *Syn.* 388. Hordeum diſtichon. *Dod.* 501. *Ger.* 70. *Park.* 1130. *H. Ox.* iii. 206. Hordeum floſculis lateralibus maſculis muticis. *H. Cliff.* 24. Common Barley.

" Creſcendi locum natalem circa ſecale, hordeum, triticum, cerealia iſta " pro frumentis, non modo per totam Europam, ſed fere per totum terrarum " orbem, recepta, fateor me dare non poſſe, nec apud authores reperiri me- " moriæ ullibi proditum." *H. Cliff.* 25. " Cardanus refert in Atholia, Sco- " tiæ regione, Hordeum abſque ſemine produci: in Cappadocia vero ſine cor- " tice." *J. B.* ii. 420. He has taken a graſs for it.

Hordeum, q. horridum ſc. ariſtis: or from φορβη alimentum, αφερβω nutrio, if it was called anciently fordeum, as ſome contend. vid. *R. H.* " Hordeum, " κριθη, ἀπο τϐ διακριθηναι, quod eo reperto & in uſum recepto, glandibus " ſpretis, a brutis homines diſtincti ſunt." *B. P.* 22. vid. *Bod. in Theoph.* 932. This grain was very anciently famous for its uſe in food, drink, and medicine.

" Antiquiſſimum in cibis hordeum, ſicut Athenienſium ritu, Menandro " autore apparet, gladiatorum cognomine, qui Hordearii vocabantur. *Plin.* " l. 18. c. 7. " Nonnullos dimovendo ex propria natura, putrefaciendoque " leviter, ſuccos ad bibendum idoneos cogunt: veluti qui vinum ex Hordeo, " triticove conficiunt; aut quod zythus (ζυθος) in Ægypto appellatur." *Theoph. de cauſ.* l. 6. c. 15. p. 368. " ex Hordeo zythum (ζυθος) paratur, quod quidem " urinas cit. . . Fit & ex Hordeo potus, quem curmi (κϐρμι) vocant, eoque " ſæpenumero pro vino utuntur. Verum dolorem capitis infert, pravumque " ſuccum gignit, ac nervos lædit. Parantur & ſimilia potus genera ex tritico " quemadmodum in Iberia occidentali & Βρεττανια. *Dioſcor.* l. 2. c. 109 and 110.

110. p. 125. " Ex iisdem (frugibus) fiunt & potus zythum in Ægypto, " cælia & ceria in Hispania, cervisia & plura genera in Gallia, aliisque pro- " vinciis; quorum omnium spuma cutem fœminarum in facie nutrit." *Plin.* l. 22. c. 25. Galen, Ægineta, and Suidas mention zythum. " Diodorus scri- " bit, Bacchum, ευρειν το εκ της κριθης κατασκευαζομενον πωμα, το καλουμενον " ζυθον." *Dalec. in Plin.* p. 587. " Expertus ipse didici vix differre talem " cervisiam a vino generosissimo; et miratus sum ab omni ævo, nobis cog- " nito, id notissimum fuisse atque usurpatum;" *Boerh.* who adds from *Diodorus Siculus*, l. 1. " Osiris rex, si quæ tellus plantam vitis non aleret, docuit " ex Hordeo potum vini fragrantia & jucunditate, non multo inferiorem;" *Herodotus* (in Euterpe), " Ζυθος οινος απο κριθης γινομενος;" *Tacitus (de Mor. Germ.)* " Potus ex Hordeo aut frumento, in quandam similitudinem vini cor- " ruptus;" *Aëtius*, " Βυνη Hordeum est madefact. donec germen emisit, dein " tostum cum enatis ligulis." *Chem.* ii. p. 192.

SECT. II.

It is an acescent and farinaceous grain, antiseptic, incrassating and nourish- ing; and commended in all acute, inflammatory, and putrid diseases. It is given in various forms; commonly decocted, or in decoction; and much used in food, but more in drink, especially when fermented into ale and beer, whence a spirit is distilled no ways inferior to the spirit of wine.

" Refrigerat & siccat 1. abstergit, aperit, digerit, emollit; est diureticum, " nutritivum. N. crudum ventriculo aliquatenus inimicum est, quippe flatu- " lentum: tamen coctione corrigitur. *Præp.* 1. Aqua Hordei graminis. Fit " mense Maio, colligiturque mane gramen rore adhuc madidum. Insignis " est efficaciæ in æstu domando; extrinsecus in cephalalgia mitiganda, oculo- " rum defluxionibus calidis emendandis, &c. 2. Decoctum Hordei, seu aqua " decoctionis hordei. Sumitur hordeum non excorticatum si intentio sit ab- " stergere, exiccare: excorticatum sin animus digerere, sitimque extinguere, " &c." *Schrod.* 603.

That barley is a farinaceous grain, and as wholesome as any other, of which bread, the staff of life, is made, is generally allowed, and confirmed by daily experience. But that the liquors, prepared from it by fermentation, are to be compared with the generous blood of the grape, is what wine-bibbers will by no means allow. It is true *Dioscorides* says, " renes et nervos zythum ten- " tat, meninges potissimum offendit, inflationem parit, vitiosumque creat, et " elephantiasin inducit." He adds, " Ipso vero maceratum ebur obsequio- " sum, et operi tractabile redditur." If all be equally true, it needs no an- swer. Of curmi he says, " Dolorem capitis infert, pravumque succum gignit, " ac nervos lædit." But has not wine the same effects? Is the elephantiasis more common in Britain than in wine countries? Or are the people less healthy and robust here than in France? And has not excess in wines as bad conse- quences as excess in malt liquors? Although the fully rectified spirit is the same, from whatever fermented liquor it is prepared; yet we find wines are commonly binding, and malt liquors laxative; while the latter is more nourish- ing than the former. The one therefore may be proper in some circumstances,

where the other is not; but, generally ſpeaking, where beer and ale are prejudicial, the uſe of wine ſhould not be allowed. To uſe a little wine for the ſtomach's ſake, was certainly good advice of *St. Paul* to *Timothy*. And I have known ſmall beer agree better with ſome ſtomachs than water, as well as porter and ſtrong beer with others. Boerhaave's preſcription of ſtrong beer and old cheeſe to a valetudinary lady proved a cure, though laughed at by the ignorant.

" Analyſi chymica ex granorum hordei ℔viß. prodierunt humorum ℔ij. " ʒxv. ʒß; olei ʒiv. ʒvß. Carbo pendebat ℔j. ʒxiij. ʒviiß; unde cine- " rum ʒij. ʒvj. gr. xl. ac inde ſalis fixi alcali ʒj. (ergo terræ ʒj. ʒvj. gr. xl.) " & jactura fuit ℔j. ʒvj. ʒiiß. (ſum ℔vj. ʒviij.) . . . . Hordeum non eaſdem " cum tritico facultates obtinet: ſiquidem triticum calefacit: Hordeum vero " quocunque modo paratum ſit, nunquam corpus calefacit, ſed quodammodo " refrigerat & abſtergit, & variè pro modo præparationis tum humectat, tum " ſiccat." Ita nugatur *Geoff.* iii. a p. 563. ad 588. vid. aqua hordeata *Ph. Lond.* p. 76. and *D. Pemberton*'s remark on it. *Diſpenſ.* p. 252.

HYOSCYAMUS.

SECT. I.

1. Hyoſcyamus, Hyoſcyamus niger. *off.* Hyoſcyamus vulgaris, vel niger, *B.B.* 169. *T.* 118. *H. Ox.* ii. 494. Hyoſcyamus niger. *Dod.* 450. *Ger.* 353. Hyoſcyamus vulgaris. *J. B.* iii. 627. *Park.* 362. *R. H.* 712.-1. *Syn.* 274. Hyoſcyamus foliis amplexicaulibus. *H. Cliff.* 56. Common or Black Henbane. —This has ſmall, roundiſh ſeeds, ſomewhat flatted, of an aſh-colour, ſubviſcid, and diſagreeable though almoſt inſipid to the taſte, and, when green, of a faint ſmell.

2. Hyoſcyamus albus. *offic.* Hyoſcyamus albus major, vel tertius Dioſcoridis, & quartus Plinii. *B. P.* 169. *T.* 118. *H. Ox.* ii. 494. Hyoſcyamus albus. *Dod.* 451. *J. B.* iii. 627. *R. H.* 712. *Ger.* 353. *Park.* 262. Hyoſcyamus, foliis petiolatis, floribus ſeſſilibus. *H. Cliff.* 56. White Henbane.—The ſeeds of this every way reſembles the former, only are a little lighter in colour. Both are beautifully and regularly pitted, when viewed by a microſcope; and have no ſmell, when ripe and dried.

The black is very common with us, and grows by road ſides, and in fat and rubbiſhy places; the white in Languedoc, &c. This is commonly annual; but ſometimes will laſt two years: the black is always biennial. They flower in June and July. Authors generally allow the uſe of the ſeed of the white only, and condemn the black; but the white was never uſed here. " Ex Hyoſcyamis eligere monet Fernelius floribus albis, ſemineque albo, re- " liquis neglectis. *officin. nat.* ejus radix, ſemen, folia." *Schrod.* 603. " *Uſu.* " Hyoſciami offic. radix herba: Hyoſciami albi offic. ſemina." *Dale* 181. & *Pharm. Lond.* edit. 1721. " Hyoſciami albi ſemen, Hyoſciami nigri folia." *Pharm. Edinb.* 1744. " Utriuſque ad uſum externum folia, flores, & ſemina " adhibentur ad uſum internum vero ſemina tantum. Nonnulli nigrum ma- " jori virulentia præditum eſſe ſuſpicantur, quapropter illum prorſus rejiciunt,

" albi

" albi tantum ſemina uſurpantes. Sed ab omnibus fere tum Pariſienſibus, " tum Germanis & Anglis niger adhibetur." *Geoff.* iii. 594. The flower of neither of them is white, nor is the ſeed: on their virulency, *i. e.* narcotic quality, depend all their virtues. Sed N. B. Diſſentiunt authores de Hyoſcyamo albo.

" Hyoſcyamus frutex eſt caules emittens craſſos, folia lata, oblonga, di- " viſa, nigra, hirſuta: ſecundum vero caulem, continua quaſi ſerie, flores " prodeunt, tanquam Punicorum cytini, ſcutulis ſepti ſeminum plenis, ceu " papaveris. Tria porro ſunt ejus genera. Unum flores profert pene purpu- " reos, folia ſmilaci ſimilia, ſemen nigrum, ac cytinos præduros & ſpinoſos: " alterum flores habet luteos, folia & ſiliquas molliores, tenerioreſve, & ſemen " ſubflavum, ſicut eryſimum. Ambo inſaniam gignunt & ſoporem, ideoque " vix in communem uſum recipiuntur. Tertium genus, quod mitiſſimum " eſt, adeoque ad medicinam utile, pingue, molle, lanuginoſum, candidis " floribus ac ſemine. In maritimis ruderibuſque naſcitur. Albo itaque uten- " dum eſt: idque ſi deſit flavum uſurpari oportet. Nigrum enim ceu deter- " rimum improbatur." *Dioſcor.* l. 4. c. 69. p. 269.

" Herculi eam quoque aſcribunt, quæ Apollinaris, apud Arabas altercum " ſive altercangenon, apud Græcos vero hyoſcyamus appellatur. Plura ejus " genera: unum nigro ſemine, floribus pene purpureis, ſpinoſum. Vulgare " autem candidius eſt et fruticoſius, altius papavere. Tertii ſemen irionis ſe- " mini ſimile: et omnia inſaniam gignentia, capitiſque vertigines. Quartum " genus molle, lanuginoſum, pinguius cæteris, candidi ſeminis, in maritimis " naſcens, hoc recepere medici." *Plin.* l. 25. c. 4.

" Inter plurima *hyoſcyami* nomina manſerunt illa tria. 1. et uſitatiſſimum " eſt hoc Græcum, quod faba ſuilla Latinis eſt. Retinuerunt officinæ, ſed " corruptum in juſquiamum. Cauſam ejus appellationis credo quod paſtu " ejus apri convulſionibus moriantur. 2. *Apollinaris.* Cauſam credo, quod " qui ſumpſerint, delirent inſtar poetarum. 3. *Altercum.* Plinius Arabicum " eſſe vult. Non credit id Scribonius Largus, et deducit ab altercando, quod " perpetuas altercationes moveant, qui ſumpſerint." *Hoffman*, p. 257. It is called alſo herba canicularis, et dens caballinus in Schroder; and " herba cani- " cularis, herba calicularis, faba Jovis, fabulum, mania *quorundam.*" *Geoff.* iii. 593. The ſeed is ordered internally, and the root and leaves externally, by *Hippocrates.*

SECT. II.

The ſeed, as well as the leaves and root, is anodyne and narcotic: it is commended in ſpitting of blood, and catarrhs; and gave name to an electuary, which was omitted in the laſt edition of our diſpenſatory. The leaves are ſometimes uſed externally as anodyne, repellent, and diſcutient, and thus are an ingredient in the ung. populeon. Some make anodyne necklaces of the roots for childrens teething; others for the epilepſy.

" Refrigerat 3. ſiccat 1. mire ſomnum inducit, ſtupefacit, acrimoniam mi- " tigat, rationem perturbat. Unde internus ejus uſus rariſſimus eſt, exhibe- " tur tamen ad hæmoptyſin curandam. Externus aliquatenus crebrior, ſcil. " in tumoribus calidis, in podagra, in odontalgia (ſuſcipitur fumus feminis

" per

" per infundibulum). Tralliani amuletum antipodagricum ex radice, vid. " l. xi. (p. 314.) *Præpar.* 1. Aqua ex fol. fl. ac ſemine immaturo deſtill. " 2. Oleum expreſſum, ex ſemine. 3. Extractum, ſeu ſuccus Hyoſcyami." *Schrod.* p. 604.

1. There is nothing very remarkable in the taſte of the black henbane, but it has a ſtrong diſagreeable ſmell, ſomething like that of garden clary, but more fetid. What we have here for the white (which is the ſame with the H. albus. *R. H.* " Floribus minoribus, in nonnullis totis luteis, in aliis lu- " teis, cum fundo obſcurè purpureo.") has nothing of the ſcent of the black. " Odore fœtido facile ſe prodit Hyoſcyamus niger. Radix minus olida quam " folia." *J. B. R. H.* 711. " Gravis odoris ac ingrati tota ſtirps eſt, caput " aggravans & ſomnolentiam inducens." *Geoff.* iii. 593. " The leaves are " of a rank, ſtrong, offenſive ſmell." *Mill. Bot.* 236. " Graviſſimè olet, " radix eſt ſaporis ſubdulcis, fere inſtar cinaræ." *Nucl. Belg.* 145. " The " leaves are inſipid, and ſmell ill: they redden pretty much the blue paper; " the root reddens it ſomewhat leſs, is ſweetiſh, and has the taſte of the arti- " choak. By a chymical analyſis the leaves give ſome volatile ſalt and much " oil." *T. Hiſt.* p. 201. — 2. It is anodyne and hypnotic, outwardly applied. " Unguentum de Hyoſcyamo præſtans anodynum comperimus." *Wepfer. Cic.* p. 233. " Apud nos ex ſemine Hyoſcyami albi fit oleum, cujus ad paran- " dum ſomnum miræ ſunt vires temporibus illitum. Eſt etiam in uſu in " gonorrhœa & nimiis menſibus, regioni lumborum & perinæo adhibitum. " In doloribus aurium, cum croco aut caſtoreo, infunditur. In dentium do- " loribus cum lana imponitur." *Hoffm.* p. 260. Yea it has been obſerved, that a clyſter made of a decoction fol. Hyoſcyami M. ſs. with ſome carminatives in milk and turpentine, cauſed a furor and delirium, which laſt continued ſome hours; " donec poſt aliquot horas novi clyſmatis acrioris injectione, alvus " a ſcybalis triduum jam retentis, una cum clyſtere antea injecto, liberata " fuit: in quo quaſi momento, non ſolum delirium ceſſavit, ſed intra biho- " rium etiam duo calculi renales rejiciebantur." Ex *Ephem. N. Curioſor.* de cur. 3. An. 9. & 10. p. 178. in appendice. *Geoff.* iii. 599. *Miller (Bot.* 237.) ſays, " The roots are frequently hung about childrens necks, being cut to " pieces, and ſtrung like beads, to prevent fits, and cauſe an eaſy breeding " of their teeth." — 3. Inwardly taken its narcotic virulency is ſufficiently atteſted, and the ſymptoms it cauſes very various and ſurpriſing. " Recentia " folia illita, ad mitigandos omne genus dolores, apprime ſunt idonea. . . . " Cocta vero olerum inſtar, & tryblii menſura eſitata, mediocrem mentis alie- " nationem faciunt. Aiunt & idem efficere, ſi cui in colo ulcus ſentienti in- " fundantur." *Dioſcor.* l. 4. c. 69. p. 270. " Hyoſcyamus in potu cibove " ſumptus, qualem ebriorum mentis alienationem infert." *Dioſc. Alexiph.* c. 15. " p. 407. " Altercum (quod Græci υοσχυαμον vocant) qui biberunt, caput " grave veniſque diſtentum habent, mente abalienantur, cum quadam verbo- " rum altercatione (inde enim hoc nomen herba trahit altercum) poſtea ſo- " piuntur, & omni ſenſu carent, viveſcentibus membris eorum." *Scrib. Larg.* c. 49. col. 224. That the ſeed cauſed mentis alienationem was not unknown to *Hippocrates*. vid. *de Morb. Mul.* l. 1. *Ed. Fæſ.* p. 629. l. 18. There is in *Wepfer. de Cicut.* p. 230. an account of ſome very extraordinary effects the roots Hyoſcyami nigri had on the people of a monaſtery, who had eaten them boil-

ed,

ed, and dreſſed with oil, vinegar, and ſalt, in place of, and together with, cichory roots by a miſtake. " Poſt hujuſmodi collationem ſuo tempore cubi-
" tum itum. Hic enimvero oriri ſymptomata cœperunt, et veſcarum radi-
" cum paulatim diffundi toxicum; ſentiri a quibuſdam capitis vertigo, aliquo-
" rum torreri linguæ ac labia, aſperari fauces, torqueri nonnullorum ilia, ac
" totis artubus male haberi. Fuit qui gargariſmo palati ardorem compeſcere
" ſtuduit, ſed lingua, velut in frixoria toſta, omnem reſpuit medelam. In-
" ſonante noctis duodecima, cum ad preces matutinas excitarentur, miſerabi-
" lem aliquorum metamorphoſin ſpectare fuit. Unus ut pro vitâ deſperata ha-
" bitus, ſacramentis provideri debuerit: alius quaſi dentibus nuces frangeret,
" et exemptos nucleos fringillis domeſticis projiceret: alius ilia ſibi rumpenda
" clamitabat. Ex iis qui ad chorum venerant," ſome could not read, others read what was not in the book, others ſaw the letters running like piſmires before them. " Lepidum præterea fuit, mane magiſtrum ſartorem videre la-
" boraturientem, qui ne filum quidem armare acu, nec a tyrone armato,
" tangere rem acu, ut ſibi videbatur, jam tricuſpide, valens, quovis punctu,
" aut digitos, aut poplitem cruentavit." &c. vid. *Wepfer.* l. c. & *Geoff.* iii. 596. ad 602. where are yet much greater wonders quoted from the German Ephem. which, however are ſcarce credible; as that the vapour of the boiled herb, or ſmoak of the burning ſeed, turns people furious, and ſets them a fighting; or the effiuvia of the ſeeds wrapt up in paper in a ſtove (" in ſuperiori textrini
" in hypocauſto conſtituti partæ") ſhould ſet a man and his wife, otherwiſe good friends, by the ears. Sure I am that I have kept ſeveral ounces of the ſeed, huſks and all, ſome years by me; and, to try the effects of the fumes, have burnt a great deal of it without finding the leaſt diſorder, or uneaſineſs of any kind, more than if it had been common chaff. " Semen Hyoſcyami
" prunis impoſitum, fumum emittit teterrimi odoris, quo naribus vel ore per
" infundibulum excepto, empirici expellunt vermiculos, qui aliquando in naſo
" aut dentibus naſcuntur, eoſque in ſubjecta pelvi aqua repleta excipiunt, ut
" melius oculis percipiantur." *R. H.*

" Analyſi chymica ex foliorum & ſummitatum floridarum Hyoſcyami nigri
" ℔v. prodierunt humorum ℔iv. ℥v. ʒvj. gr. lxvj; ſalis vol. urinoſi ʒj.
" gr. xij; olei ℥j. ʒviiß. Carbonis fuere ℥v. ʒivß; unde cinerum ℥ij. ʒiiß,
" ac inde ſalis fixi mere alcali ℥j. ʒiß. (ergo terræ ʒix.) & jactura fuit ℥ij.
" ʒiij. gr. lxvj." " Ex ſeminum recentium ℔v. prodierunt humorum ℔j.
" ℥viij. ʒij; olei ℔j. ℥v. ʒj. gr. liv. Carbonis fuere ℔j. ℥ix. ʒij; unde cine-
" rum ℥v. ʒvij, ac inde ſalis fixi ſalſi cum ſubſtantia terrea talcoſa permixti
" gr. xxxvj; (ergo terræ ℥v. ʒviß.) & jactura fuit ℥ix. ʒj. gr. xviij." (ſum ℔v. – ʒj.) " Folia ſaporem fatuum referunt: manibus confricata odorem vi-
" roſum exhalant. Eorum ſuccus chartam cæruleam rubram efficit. Ra-
" dices ſubdulces ſunt & cinaræ ſapore donantur. Planta ſalem eſſentialem
" obtinere videtur ammoniacalem, cum multo craſſo oleo viroſo conſociatum.
" Ejus ſemina ſaporis ſunt aliquantiſper glutinoſi, odoris narcotici & ingrati.
" Oleum continet tum tenue, tum craſſum viroſum & valde narcoticum,
" ſummæ rarefactionis aut expanſionis capax, cum ſale ammoniacali con-
" junctum." vid. *Geoff.* iii. 594. et *T.* l. cit. *Sed nihil explicant.*

The doſe is uncertain. " Semen laudatur in hæmoptiſi a ϑß. ad ϑj." *Geoff.* iii. 602.

LINUM.

SECT. I.

Linum, Linum ſativum. *off.* Linum ſativum. *B. P.* 214. *T.* 339. *Dod.* 533. *Ger.* 556. *Park.* 1335. *R. H.* 1072. Linum. *J. B.* iii. 450. *R. Syn.* 362. Linum latifolium annuum, cæruleum, ſativum. *H. Ox.* ii. 572. Linum, ramis foliiſque alternis, lineari-lanceolatis; radice annua. *H. Cliff.* 114. Common or manured Flax, or Line.

" Linum ſylveſtre, ſativum plane referens. *J. B.* iii. 452. Linum arvenſe. *B. P.* 214. (*T.* 339.) Common wild Flax.—" Neſcio an aliter a ſativo differat, " quam ut ſylveſtre a culto inter ſegetes frequens." *R. Syn.* 362. " Videtur " a facie Africanæ originis, et forte a ſeminibus ſatis; tandem manſuevit." *H. Cliff.* 114.—The ſeed of this plant, which is the only part uſed medicinally, is very well known and eſteemed by every body. vid. *Plin.* l. 19. proem. et c. 1. *Bod. in Theoph.* p. 943. *J. B.* iii. p. 451.

SECT. II.

It is antacrid, incraſſating, anodyne, and relaxes the fibres, or weakens their tone; called pectoral; and commended internally in coughs, conſumptions, pleuriſies, heat of urine, nephritic pains, &c. and externally in fomentations, cataplaſms, clyſters, for pains, tumors, hæmorrhoids, &c.

" Semen calfacit 1. in reliquis temperatum eſt, digerit, emollit, maturat. " *Uſus præcip.* in tuſſi, pleuriſi, phthiſi. Extrinſecus maturat tumores, lenit " dolores, fœtum expellit. *Præp.* 1. Mucilago. Fit coctione vel infuſione " in aqua. 2. Farina. 3. Oleum expreſſum. Eaſdem vires retinet quas " ſemen. Prodeſt etiam ad pterygia oculorum (inſtillatum) in primis cum " ſucceſſu exhibetur pleuriticis, atque dolore colico vexatis, in quibus & in- " trinſecus prodeſt, ut et in liene duro. Doſis ad ʒij." *Schrod.* 617.

1. It is of a ſoft and ſomewhat diſagreeably ſweetiſh taſte, and little ſmell; though the oil ſmells ſtrongly. It is not acrid, but yields plenty of mucilage to water; and of oil by expreſſion, which thickens by boiling, and dries in the air into an almoſt indiſſoluble cruſt. " Linum vulgo notum eſt, cujus " ſemen eaſdem quas fœnum græcum vires habet: quippe quod diſcutiat et " emolliat omnem intus foriſque inflammationem, &c." *Dioſcor.* l. 2. c. 125. p. 129. — 2. The water in which flax is ſteeped is reckoned of a poiſonous nature: and there is an act of parliament in James VI.'s time againſt laying green line in lochs or burns. — 3. Linſeed uſed in food affords but bad nouriſhment, or rather ſpoils the ſtomach, and breeds obſtructions in the viſcera. " Lini ſemen " eſum flatuoſum eſt etiamſi frigatur: adeo ſane recrementitia humiditate " plenum eſt." *Galen Simpl.* l. 7. p. 54. F. " Quidam Galeni tempore ute- " bantur ſemine Lini toſto pro obſonio cum garo, item melle admixto. Sed " flatuoſum eſt, inquit, ſtomacho incommodum et ægre concoquitur. Quod " paucis abhinc annis Middleburgi in Zelandia (inquit Tragus) animadverti " potuit, cum propter frumenti aliarumque frugum inopiam, plerique ex civi-

" bus pane & cibis ex hoc coctis vescerentur. Distenta enim his valde cito " hypochondria fuerunt, & facies aliæque partes tumidæ factæ, quorum non " pauci sic affectæ etiam mortui sunt." *R.H.* 1073. vid. etiam *Galen de Alim.* " fac. l. 1. c. 32. p. 15. E. " Lini semen comestum alvum sistit, habet & " nonnihil refrigerans." *Hippoc. de Diæta*, l. 2. p. 356. l. 48. " Lini semen " etiam tussientibus pueris in cibo exhibent, cum ovi vitello assato & sesamo " torrefacto." *Hip. de morb. mul.* l. 1. p. 603. l. 39. Hence it is hurtful ubi fibræ laxæ & debiles, & humores pituitosi. *An & narcoticæ naturæ?* Probabiliter. *Certissime debilitat.*

" Analysi chymica ex seminum Lini ℔v. prodierunt humorum ℔j. ʒvj. ʒij; " olei ℔j. ʒv. ʒiiiß. Carbonis fuerunt ℔j. ʒiij. ʒiiß; unde cinerum ʒiv. ʒviß. " & inde salis fixi salsi talcosi ʒj. (ergo terræ ʒiv. ʒvß.): ac jactura fuit ʒxvij. " salem obtinet essentialem vitriolico-ammoniacalem." *Geoff.* iii. 736.

The recently expressed oil is given to ʒij. ʒiij. or more, in the pleurisy, iliac passion, &c. and the seed, by way of tea (ʒij. pro aquæ ℔j.) is now much used. The seed is an ingredient in the oleum mucaginum, cataplasma suppurans: and the oil is used in the unguentum sambucinum.

" Oleum Lini cum C.V. destillatum mire medetur paralysi." *Herm. Cyn.* 428. " Observandum est ut oleum Lini recens sit, & dulcis saporis. Si recens ob- " tineri nequeat, ejus rancor & sapor ingratus tollitur, illud cum aqua tepida " in ampulla vitrea diu conquassando, & aquam identidem mutando, donec " nullus sapor & odor ingratus superfit." *Geoff.* iii. p. 739.

LITHOSPERMUM.

SECT. I.

Lithospermum, Milium solis. *offic.* Lithospermum majus erectum. *B. P.* 258. *T.* 137. Lithospermum minus. *Dod.* 83. *Ger.* 609. Lithospermum vulgare minus. *Park.* 432. Lithospermum sive Milium solis. *J. B.* iii. 590. *R.H.* 503. *Syn.* 228. Lithospermum erectum vulgare majus, flore ochroleuco. *H. Ox.* iii. 446. Lithospermum seminibus lævibus, corollis vix calycem superantibus. *H. Cliff.* 46. Gromwell, or rather Gromill or Graymill—This has a roundish, shining, white seed, containing, within an hard insipid shell, a farinaceous sweetish kernel.

" Lithospermum, quod nonnulli ἀιγωνυχον, alii ἐξωνυχον, alii ἡρακλειαν vo- " cant, propter seminis duritiem; a qua & Lithospermi nomen accepit. Fo- " liis est oleæ, longioribus tamen, latioribus atque mollioribus, & iis quidem " quæ in imo a terra exiliunt, humi jacentibus; ramulis rectis, tenuibus, " acuti junci crassitudine, firmis, lignosis; in quorum cacumine bifida propago " cauliculorum speciem exhibet, foliis longis; inter quæ semen lapidea duritie, " rotundum, candicans, ervi parvi magnitudine. Nascitur in asperis & editis " locis. Vim habet semen, cum vino albo potum, calculos frangendi, urinas- " que pellendi." *Dioscor.* l. 3. c. 158. totum. p. 237.

" Inter omnes herbas Lithospermo nihil est mirabilius. Aliqui Ægonychon " vocant; alii Diospyron, alii Heracleos. Herba quincuncialis fere, foliis " duplo majoribus quam rutæ, ramulis furculosis, crassitudine junci. Gerit

" juxta folia ſingulas veluti barbulas, & earum in cacuminibus, lapillos, can-
" dore & rotunditate margaritarum, magnitudine ciceris, duritie vero lapidea.
" Ipſi, quà pediculis adhærent, cavernulas habent, & intus ſemen. Naſcitur
" & in Italia, ſed laudatiſſimum in Creta. Nec quicquam inter herbas majore
" quidem miraculo aſpexi. Tantus eſt decor, velut aurificum arte alternis
" inter folia candicantibus margaritis: tam exquiſita difficultas lapidis ex herba
" naſcentis. Jacere atque humi ſerpere authores tradunt. Ego vulſam, non
" hærentem vidi. Iis lapillis drachmæ pondere potis in vino albo, calculos
" frangi, pellique conſtat, & ſtranguriam diſcuti." *Plin.* l. 27. c. 11. p. 677. vid. *Bod. in Theoph.* p. 1127. The lachryma Jobi is the Lithoſpermum arundinaceum fortè Dioſcoridis & Plinii. *B. P.* 258.

It grows in dry fields, thickets, &c. in England, flowering in May and June. Milium, ſoler *Mauritanis*, quod in montibus ſoler frequenter naſcatur: hinc vulgo milium ſolis inepte dicitur. *B. P.*

SECT. II.

It is antacrid, and, when uſed in emulſion, diluent, diuretic; called lithontriptic; and commended in the ſtone, gravel, ſtoppage of urine, gonorrhœa, &c.

" *Officin.* Semen, raro folia. Calfacit & ſiccat 2. calculum inſigniter com-
" minuit, ac expellit, renes abſtergit, urinas ciet, partum pellit. Doſis ſem.
" ʒj. ad ʒij. N. Sunt qui pro certo experimento jactitant, in febre quotidiana
" ante invaſionem ſemen exhibere, idque vicibus iteratis. *Præp.* aqua ſtillat.
" e foliis." *Schrod.* 627.

There is no acrimony in the kernel; and the ſtoney ſhell is indigeſtible. " Folia ſunt ſapore vix alio quam herbaceo." *J. B.* " Semen nec acre eſt,
" nec amarum, nec ullius alterius qualitatis particeps, quæ calorem indicet."
" *R. H.* " Semina oleoſa, ſaporis dulcis, lactei." *Nucl. Belg.* 197. " The
" plant ſcarce reddens the blue paper: it is aſtringent and glutinous: the fruit
" reddens it a little: all that is drawn, by a chymical analyſis, from the grains,
" is alcaline; they yield ſome volatile ſalt, and much oil and earth." *T. Hiſt.* p. 284. But according to *Quincy* they are of a pungent acrid taſte, and powerful diuretics, forcing by the urinary paſſages very much; " and therefore are
" conveniently made into an emulſion with barley-water, or ſuch ſoftening
" liquor; becauſe that guards the tender parts againſt their pungency, which
" otherwiſe might be too ſenſible." *Pharm.* p. 147. " Eſt diureticum ut
" oculi cancri, ut vitrum, & alia terrea, &c." *Hoffman*, p. 318. vid. *Lap. Judaicus* ſupra, p. 275. Some make the ſhells abſorbents. " The ſhells ſem.
" milii ſolis, not only with aqua fortis, but ſome other acids, make a greater
" and quicker bullition and efferveſcence than any other vegetable body that
" I have tried in its natural ſtate." *Grew on Mixt.* And hence *Herman* (*Cynoſ.* p. 322.) ſays, " Horum ſubſtantia in omnibus fere cum oculis cancrorum con-
" venit." But—2. I infuſed ſome of theſe ſeeds in ſpir. aceti; alſo in ſpir. vitrioli; and in neither could I obſerve any thing like bullition, efferveſcence, or ſolution. How then can they be abſorbent? However—3. In emulſion they are very ſafe, even in the ſtone, and may do ſervice in heat of urine,

and

and other nephritic ſymptoms: there being no danger in the doſe, *notante Raio.*

" Analyſi chymica ex ſeminis milii ſolis ℔v. prodierunt humorum ℔j. ℥j. ʒij. gr. lx; ſalis vol. urinoſi ʒijß; olei ℥viij. ʒv. Carbo pendebat ℔ij. ℥xivß: qui per 16 horas calcinatus, reliquit cinerum nigrorum, ſaporis expertium ℔ij. ℥iij. ʒß: ex quibus lixivio terræ rufeſcentis levis aliquantiſper ſalſæ gr. lxij. extracta ſunt. Jactura fuit ℥vij. ʒj. gr. xlviii. (ergo terræ ℔ij. ℥ij. ʒvij. gr. xlvj.) ſemina hæc ſapore donantur farinaceo, glutinoſo nonnihil aſtringente; ſalem obtinent eſſentialem ammoniacalem, cum oleo copioſo & uberrima terra aſtringente conjunctum. . . Renes a mucilagine viſcidâ, calculorum fotrice & nutrice optime abſtergunt, has partes ab acrimonia urinæ optime defendunt, ſi pulverata ad ʒj. propinentur in vehiculo idoneo.—Lithontripticum nondum novimus. Equidem pituitam & craſſos humores, arenulas aut calculos glutinantes diſſolvi & pelli poſſe medicamentis idoneis, vel etiam his ſeminibus concedimus." *Geoff.* iii. 743. Are not here ſome inconſiſtencies? Vid. *R. H.* 503.

MILIUM.

SECT. I.

Milium. *offic.* Milium ſemine luteo, vel albo. *B. P.* 26. *Theat.* 502. *T.* 514. *H. Ox.* iii. 196. Milium. *J. B.* ii. 446. *Dod.* 506. *R. H.* 1251. *Ger.* 80. Milium vulgare album. *Park.* 1136. Panicum, panicula laxa, flaccida, foliorum vaginis pubeſcentibus. *H. Cliff.* 27. Mill or Millet.—This is a ſmall roundiſh grain, covered with a ſmooth yellowiſh huſk, of a farinaceous taſte.

It is ſowed in Italy, &c. in the fields with other corn. Our climate is too cold for it. The black is ſomewhat hardier than the white. It is the κεγχρος. *Theoph. hiſt.* l. 8. c. 3. p. 155. *Dioſcoridis*, l. 2. c. 119. p. 127. vid. *Bod. in Theoph.* p. 928. " Veteres non deſcribunt Milium peculiariter; ſed ex iis quæ ex Theophraſto & Plinio congeſſit Cæſalpinus hiſt. 51. facile eſt judicatu, quod habemus verum eſſe Milium. Utimur albo ſolo. Nigrum pro vitioſo habetur." *Hoffman* 345. vid. *Plin.* l. 18. c. 7.

SECT. II.

It is nouriſhing, like other grain, and aceſcent; called aſtringent, and (in decoction) ſudorific and diuretic; and commended internally for fluxes, &c. and outwardly as diſcutient and anodyne. But it is little uſed in medicine.

" Refrigerat & ſiccat 3. alvum conſtipat, eſt difficilis digeſtionis, plurimi tamen ac laudabilis nutrimenti. Decoctum ſudorem & urinam potenter movet. Extrinſecus exiccat, catarrhos, dolores capitis & ventris ſedat; (toſtum cum ſale com calide vertici vel ventri impoſitum), conſumit lac, pellit calculum renum (in baln.) diarrhœam infantum ſiſtit (cataplaſm) cum decocto ſumach. *Præp.* 1. Aqua ſtillat. ex herba floreſcente. Inſigne præſervativum cenſetur in calculo. 2. Decoctum D. Ambroſii." *Schrod.* p. 627.

It is a farinaceous grain, and, when well dreſſed, very palatable. It is ſaid to be binding, and at the ſame time to have little viſcidity in it: which, if true, ſeem to point out its being not only very nouriſhing, but alſo light and wholſome food. "Milium frugibus cæteris (ἄτρο φωτερα) minus alit: in panes vero coactum, aut pultis inſtar præparatum, alvum ſiſtit & urinam cit. Toſtum vero & in ſacculos inditum, fotu torminibus aliiſque doloribus eſt auxilio." *Dioſcor.* l. 2. c. 119. p. 127. "Si Milium debito modo (docet illum Varro 1. rei ruſt. 57.) condatur, durare poteſt ultra 100 annos, cùm triticum 50 tantum. . . . Licet paſta miliacea lenta appareat, quando cum multo liquore teritur, ut Galen 1. alim. 12. ait: ſubito tamen atque abſumptus eſt liquor, maſſa, & præcipue panis, fit friabilis, ut experientia docemur. Hinc Galen de Simpl. l. 7. (p. 50.) ſcribit, ob friabilitatem vix uſurpari poſſe in cataplaſmatis." *Hoffman*, p. 346. § 3. "Milii panis dum recens eſt, & arte quadam piſtoria rectè paratus, ut Veronæ fit, & ita calidus ut ex furno excipitur devoratus, ſua quadam dulcedine placet, & a pluribus expetitur. Quare non deſunt qui ipſum calidum per plateas circumferant clamantes, Pandi Miglio, caldo, caldo: at cum obduruit ingratus ſane eſt. Sylvani, qui carbones & arbores ſecant in Tridentino agro, ſola pulte miliacea, quam vulgo appellant Polenta, ſe alunt, eam cum lacte edentes; nec alio dicunt ſe poſſe alimento perdurare: quare anno toto hoc tantum alimento vivunt, & fontanam aquam potant." *Matth.* p. 328. It is commended in decoction, in intermitting and malignant fevers, ſmall-pox, meaſles, dropſy, &c.

NIGELLA.

SECT. I.

Nigella, Melanthium, Gith. *offic.* Nigella flore minore ſimplici candido. *B. P.* 145. *T.* 258. *R. H.* 1071. *H. Ox.* iii. 515. Nigella Romana ſive ſativa. *Park.* 1375. Melanthium. *Dod.* 303. *Ger.* 1084. M. ſativum, ſimplici flore. *Cluſ. H.* ii. 207. M. calyce & flore minore, ſemine nigro & luteo. *J. B.* iii. 208. Garden Nigella, or Fennel-flower.

This is commonly made the officinal ſpecies: but the Nigella arvenſis cornuta (an Melanthium & Gith Dioſcoridis. *B. P.* 145?) is preferred by ſome. It grows among the corn in Germany, France, Italy. In our gardens it flowers in July. The ſeed is ſmall, black, wrinkled, and angular; of an oily, ſweetiſh taſte, and ſoft aromatic ſmell.

"Melanthium frutex eſt exiguus, furculis tenuibus in binorum dodrantum altitudinem, aut etiam amplius aſſurgens, foliis veluti ſenecionis, at multo tenuioribus, capitulo in cacumine parvo ceu papaveris oblongo, intrinſecus diſſepimentis quibuſdam prædito: intra quæ ſemen latet nigrum, acre et odoratum, quod panibus inſpergitur." *Dioſc.* l. 3. c. 93. p. 211. "Gith ex Græcis, alii Melanthion, alii Melaſpermon vocant. Optimum quam excitatiſſimi odoris, et quam nigerrimum." *Plin.* l. 20. c. 17. vid. *Bod. in Theoph.* p. 832.

SECT. II.

It is called pectoral, ſtomachic, carminative, alexipharmic, and uterine; and is commended for phlegmatic ſtuffings of the lungs, obſtructions of urine or the menſes, agues, poiſonous bites, &c. But I cannot find that it is good for any thing.

" Calfacit & ſiccat in prin. gr. 3. attenuat, aperit. *Uſus præcip.* in muci-" lagine pulmonum reſolvenda & expectoranda, lacte augendo, urina ac men-" ſibus ciendis, morſibus venenatis corrigendis. Specifice in febribus quarta-" nis & quotidianis. Extrinſecus crebri uſus eſt in cephalalgia ſedanda, ca-" tarrhis exiccandis (ſternutando, ſuffiendo) in cucuphis, epithemat. &c. ap-" plicatum. Radix ſiſtit, proprietate ſua, hæmorrhagiam, ſi dentibus maſti-" cetur, naribuſque imponatur. *Præp.* 1. Semen præparatum. Maceratur " in aceto & exiccatur. 2. Aqua ſtillat. ex ſemine. 3. Oleum ſtillat. ex " ſemine." *Schrod.* p. 636. Stimulans aromaticum eſt in *Boerh. Lib. de M. M.* 1. It contains an aromatic oil. " Semina ſunt odoris aromatici, ſaporis ca-" lidi, & grati aromatici." *Nucl. Belg.* 207. " Saporis ſubacris, nonnihil " oleoſi." *Dale*, p. 237. " Very ſharp, ſweet, ſtrong ſmelling ſeed." *Park.* " Semen odoratum." *J. B.* & *Cluſ.* ſo that it is probably carminative and diuretic, &c. But if it is the Melanthium & Gith antiquorum, poſſibly it may be ſomewhat narcotic or virulent. " Incenſum ſerpentes fugat. Sed & ip-" ſum tradunt largius epotum enecare." *Dioſcor.* l. c. " Colligitur ſuccus " ejus ut Hyoſcyami, ſimiliterque largior venenum eſt, quod miremur; cum " ſemen gratiſſime panes etiam condiat." *Plin.* l. 20. c. 17. " Intro non tuto " immittitur." *Fernel.* p. 263. — 2. Dioſcorides commends it for obſtructed urine and catamenia, difficult breathing, and bites of ſpiders, drachmæ pondere bibitum. And outwardly for head-achs, tooth-achs, corns, leproſy, worms, &c. " Tritum vero linteolo illigatum & olfactum, ſays he, deſtillatione la-" borantes (καταῤῥοιζομενους) adjuvat." And thus *S. Pauli* uſed it. *Q. B.* p. 391. It was an ingredient in the Syr. Artemiſiæ *Matthæi de gradibus.* (vid. *Ph. Aug. Zwelf.* p. 18.) among forty others: but was thrown out of it in the *Ph. Lond.* long ago. " As for this ſyrup, there is hardly ever a diſpenſatory " in the world, which has in it ſuch an incoherent, confuſed medley: it is " often aſked for, but good for nothing." *Quincy Ph.* 371. It has forty-two ingredients in it. The Nigella is now juſtly excluded the *London M. M.*

PERSICA.

SECT. I.

Perſica, Perſica malus. *offic.* Perſica molli carne & vulgaris, viridis & alba. *B. P.* 440. *T.* 624. Perſica. *Cæſ.* 49. Perſica malus. *Lob.* 568. Perſica alba. *Ger.* 1447. Malus Perſica. *Dod.* 796. *Park.* 1513. *J. B.* i. 157. *R. H.* 1515. Mala Perſica. *Park.* par. 580. Amygdalus, foliorum ſerraturis omnibus acutis. *H. Cliff.* 186. The Common Peach-tree.

It

It grows wild in Persia, America, &c. In gardens it flowers in March, and the fruit is ripe in September. "*Officin. nat.* Folia, flores, nuclei, fructus sed raro, quippe hi facile putrescunt." *Schrod.* 644. "*Usu.* Folia, fructus, & præcipue flores." *Dale* 301. "Fructus." *Ph. Lond.* 1721: though that has a "syrupus e floribus malorum Persicorum," p. 66. "The flowers are only used in physic." *Miller's Bot.* p. 339. "Flores, fructus." *Ph. Edinb.* 1744. "Nuclei Persicorum." *Herm. Cynos.* p. 381. which only are kept in the shops; and that very seldom.

It is controverted whether the περσια. *Theoph. hist.* l. 3. c. 5. or περσεα, l. 4. c. 2. be the same with the Persica? vid. *Bod. in Theoph.* p. 125. *Dioscorides* has πηρσικον μηλον. l. 1. c. 164. & πηρσεα δενδρον, l. 1. c. 187. "Hanc arborem, says he, prodidere nonnulli, in Perside quidem exitiosam esse; translatam vero in Ægyptum, natura mutata, in cibos receptam." Rauwolfius "commemorat Persas, etiam hodierna die, Perseam a Persica arbore distinguere." *B. P.* 439. and 441.

SECT. II.

The nuclei or kernels agree in virtues with the nuclei ceraforum; and may be used in the same way. The flowers are purgative. The syrupus ex floribus Persicæ was little used, and therefore left out of *our* Pharm. edit. 1744.

"Fructus refrigerant & humectant 2. Nutrimenti sunt pauci, facileque "putrescunt. Verum initio pastus laxant alvum; exiccata constipant, laudanturque in fluxu alvi, &c. Flores, folia, ac nuclei, calfaciunt et siccant, "abstergunt. *Usus præcip.* (Florum) in lumbricis infantum, in alvi laxatione, "mesenterii obstructione, seri purgatione, et sim: (nucleorum) in diureticis et "lithontripticis, in obstructione epatis, ardore stomachi. Extrinsecus adhibentur crebrò in emulsionibus dolori capitis dicatis, &c. *Præp.* 1. Conditi "fructus. 2. Aqua ex floribus. 3. Aqua diuretica, ex nucleis. 4. Syrupus "de floribus. Vermes necat. Dosis ad ʒij. 5. Conserva florum. 6. Oleum. Fit expressione." *Schrod.* 644.

1. Not only the nuclei taste like the nuclei ceraforum, though more agreeable; but the flowers and leaves have something of the same flavour with that of the laurel leaves, bitter almonds, &c. only not so pleasant. "Folia sapore "amaro, qualis in nucleis, ingratiore tamen." *J. B. R. H.* "Folia, sapore "amaro qualis in nucleis, ingratiore tamen, & aroma utcunque redolentia." *Geoff.* iii. 799. "Nucleus amaricans, non tamen gustu insuavi." *J. B.* "Folia mali Persicæ gustu amara sunt, nonnihil austera, et nucleorum Persicorum odorem referentia, dum digitis conteruntur. Flores amarorem "quendam aromaticum non ingratum obtinent." *Geoff.* iii. 801. so that they might be suspected of virulency, as well as bitter almonds, and laurel leaves; were not—2. Both flowers and leaves purgative: for the cathartic stimulus may easily overcome their narcotic quality, if any such they have.

"Persica mala stomacho utilia sunt, et alvum quoque bonam præstant, si "matura fuerint. Immatura vero eandem cohibent, sed siccata vehementius." "*Dioſc.* l. c. "Nunc autem discas quod Malorum Persicorum succus, et "veluti caro facile corrumpitur, pravaque omnino est." *Galen de alim. fac.* l. 2.

l. 2. c. 19. fol. 19. D. "Addit Paulus eos qui crebrius iis ad ſatietatem "veſcuntur febre corripi; lædere & nervos proprietate quadam." *R.H.* 1517.

"Analyſi chymica ex Mali Perſicæ florum recentium ℔v. prodierunt hu- "morum ℔iv. ℥v. ʒiij. gr. xv. (quorum plus ℔iiiß. erant odoris & ſaporis "amari, nucleos contuſos referentis, & obſcure acid.); ſalis vol. urinoſi ʒj. "gr. iij; olei ℥ij. ʒvij. gr. xiv. Maſſa relicta pendebat ℥iv. ʒvj. gr. 1, unde "cinerum ℥j. gr. lxix, ac inde ſalis fixi alcali ʒiij. gr. ix. (ergo terræ ʒv. "gr. lx.) Jactura fuit ℥ij. ʒvi. gr. xxxix." *Geoff.* iii. 801. Who gives them a ſal eſſentialis tartareo-ammoniacalis. There you have alſo the analyſis foliorum; and of the pulp of the fruit: beſides four or five pages of learned, or of *wretched* ſtuff, except what is ſtolen from *R. H.*

"Minora, quæ Armeniaca (Ρωμαϊστι δε πραικοκια) Latine vero præcoqua "dicuntur, ſtomacho quam antedicta utiliora ſunt." *Dioſc.* l. 1. c. 165. totum. p. 80.

PINUS.

SECT. I.

Pinus. *offic.* Pinus ſativa. *B.P.* 491. *T.* 485. *R.H.* 1398. Pinus. *Dod.* 859. Pinus officulis duris, foliis longis. *J.B.* i. 248. Pinus ſativa ſive domeſtica. *Ger.* 1355. Pinus urbana ſive domeſtica. *Park.* 1534. Pinus foliis geminis, primordialibus ſolitariis, ciliatis. *H. Cliff.* 450. The Pine-tree.

It grows in the ſouth of France, Italy, &c. yet endures our ſevereſt winters. The nuclei, or kernels of the ſeeds, only are uſed.

"*Officin.* Nuces Pineæ, Cortex, & Folia." *Schrod.* 649. "*Uſu.* Coni, "nuclei, eorumque cortices, & reſina ſtrobilina, quæ circa conos ſeu ſtrobi- "los concreta reperitur." *Dale* 277. "Folia, nuclei, reſina. *Ph. Lond.* 1721. "Nuclei, reſina." *Ph. Edinb.* "Pinus, the Pine-tree; its fruit, and reſin." *Lewis's Pharm.* p. 52. "The nuclei, or kernels are chiefly uſed." *Miller's Bot.* 346.

Theſe ſeeds are roundiſh oblong nuts, containing, in a brown hard ſhell, a white kernel, of a pleaſant ſweet oily taſte.

The Pine-tree is probably the πευκη *Theophraſti hiſt.* l. 3. c. 10. p. 158. Although Pliny, l. 29. c. 4. ſays, "Eadem in pityocampis picea naſcentibus; yet, l. 23. c. 2. he ſays alſo, "Pinorum erucas pityocampas vocant." Some think alſo that it is the πιτυς Galeni. vid. *R.H.* 1398. "Pinus (πιτυς) vulgo "nota arbor eſt. Ejuſdem vero generis eſt quæ picea (πευκη) dicitur, ſpecie "tantum differens. Utriuſque cortex ſtypticus, &c. Pityidum nomine Pi- "cearum (πιτυων) et Pinorum (και της πευκης) fructus appellantur, &c." *Dioſcorid.* l. 1. c. 86. and 87.

SECT. II.

They agree in virtues with piſtacios and ſweet almonds, and are uſed the ſame way; are nouriſhing and antacrid; called pectoral; and commended in coughs, conſumptions, heat of urine, &c.

" Nuces pineæ (Strobili Conicoccali et Conaria veteribus) caliditate tempe-
" ratæ ſunt et humidæ; maturant, leniunt, agglutinant, reſolvunt, impin-
" guant; adeoque nucleorum uſus præcipuus eſt in phthiſi (quia nutriunt bene)
" tuſſi, ſtranguria, ac acrimonia urinæ mitiganda: ſegnem excitant Venerem,
" ulcera renum mundificant, &c. Cortices et folia refrigerant et ſiccant,
" aſtringunt. *Uſus præcip.* externi in dyſenteria, fluore menſium (ſuffiendo)
" *Præp.* Oleum exprimitur è nucleis. 2. Confectio nucleorum." *Schrod.* p. 649.

The kernels are oily, and reckoned more delicious than ſweet almonds, being but little inferior to the piſtachios. The tree yields a turpentine. The leaves and young ſhoots of any Pine, Fir, and Larch tree, are diuretic and ſomewhat aſtringent; and commended in the ſcurvy and cuticular diſeaſes.

PORTULACA.

SECT. I.

Portulaca. *offic.* Portulaca latifolia ſeu ſativa. *B. P.* 288. *T.* 236. *H. Ox.* ii. 570. *R. H.* 1039. Portulaca ſativa. *Dod.* 661. Portulaca hortenſis latifolia. *J. B.* iii. 678. Portulaca. *Park.* par. 499. Poſtulaca domeſtica. *Lob.* 210. *Ger.* 521. Portulaca foliis cuneiformibus verticillatis ſeſſilibus, floribus ſeſſilibus. *H. Cliff.* 207. Garden Purſlane, *vulgo* Garden Purpy.—It bears a ſmall black wrinkled ſeed, without taſte, and almoſt without ſmell.

It grows plentifully in Jamaica. *Sloane's Cat.* p. 87. The Portulaca anguſtifolia, ſive ſylveſtris. *B. P.* 288. Wild Purſlane (of which the former is a variety according to *Linnæus*) grows in Germany, France, Italy, Sicily. *R. H.* It is ſuppoſed to be the ἀνδράχνη *Dioſcoridis*, l. 2. c. 150. p. 138. who has cap. 151. an ἀνδράχνη ἀγρια: but this is only a conjecture. Vid. *Bod. in Theoph.* p. 750.

SECT. II.

The ſeed is one of the leſſer cold ſeeds; and has been uſed in emulſions; when it is cooling and diluent; as is alſo the herb, when eaten in ſubſtance by way of ſalad.

" *Officin.* Folia, ſemen. *Vires.* Refrigerat 3. ſiccat 2. aſtringit, pauci nu-
" trimenti eſt, lumbricos fugat & expellit. *Uſus præcip.* in mitigando fervore
" bilis, & hinc in febribus putridis malignis, ardore urinæ, ut in ſcorbuto;
" apprime ſuccurrit febricitantium æſtui (folia recentia applicata jecori, reni-
" bus, &c.) *Præp.* 1. Succus inſpiſſatus. 2. Aqua ſtillat. ex herba. 3. Sy-
" rupus ſimplex, ex ſucco. 4. Syr. compoſit. 5. Conſerva, ex foliis." *Schrod.* 654. The ſtalks are ſometimes pickled like capers.

Purſlane is very juicy, of a ſoft oily taſte, and no ways acrid: it may be uſeful in hot ſeaſons and climates, and in bilious diſeaſes and putrid ſcurvies.
" Verùm eſus ejus nimius cavendus eſt, quoniam ob frigiditatem ſuam & hu-
" miditatem, in ventriculo putreſcere apta eſt, ejuſque & reliquorum viſcerum
" tonum diſſolvere, ut in nobiſmet ipſis non ſemel experti ſumus." *R. H.* 1039.

" Folia

" Folia ſapore ſubacido." *J. B.* " Sapores ſubacidi et mucilaginoſi." *N. B.* 234.

PSYLLIUM.

SECT. I.

Pſyllium. *offic.* Pſyllium majus erectum. *B. P.* 191. *T.* 128. *J. B.* iii. 513. Pſyllium. *Dod.* 115. Pſyllium ſive Pulicaris herba. *Ger.* 587. Pſyllium vulgare. *Park.* 277. Pſyllium annuum majus, foliis integris. *H. Ox.* iii. 262. Plantago caulifera Pſyllium dicta. *R. H.* 881. Plantago annua; foliis integerrimis; caule ramoſo, erecto. *H. Cliff.* 37. Common Fleawort.—This produces a ſmall, ſhining, ſomewhat oval, reddiſh-brown or black ſeed, convex on one ſide, and a little concave on the other; of a diſagreeably inſipid viſcous taſte.

It grows wild about Montpelier, &c. In gardens it flowers in July. " It " grows in the ſouthern parts of France, from whence we have the ſeed." *Miller's Bot.* 361. " Pſyllium folio eſt cronopodis ſimile, hirſuto, at longiore, " ramulis dodrantalibus, totaque herbula fœni modo tenuis ac minutula. Coma " vero ipſius a medio caule ducit initium, capitulis duobus tribuſve conglobatis, in quibus ſemen pulicibus ſimile, nigrum atque durum. Naſcitur in " arvis & incultis. . . Fama eſt ſi virens herba domum importetur, non ſinere " in ea pulices gigni." *Dioſcor.* l. 4. c. 70. p. 270.

" Theophraſto 7. hiſt. 8. κυνοπα dicitur: oculum canis, & Canariam Gaza " vertit, Plinium forte imitatus, qui l. 25. c. 11. Pſyllium & Cynoides no" minavit, Latinis pulicaria." *B. P.* Hence it is evidently the Pſyllium An" tiquorum.

SECT. II.

It is antacrid, incraſſating, and lubricating; called a cholagogue by ſome; and ſaid to be virulent. It is commended in the dyſentery, eroſion of the inteſtines, dry coughs, hoarſeneſs, &c. But there is now little uſe made of it; only its mucilage is ſometimes applied to ſore eyes, mouths, throats, burnings, excoriations, &c.

" Evacuat bilem flavam, mucilagineque ſua acrimoniam humorum obtun" dere aptum eſt. Hinc convenit maximopere in dyſenteria, & corroſione in" teſtinorum. Doſis a ʒij. ad ʒvj. *ſcil.* ex his aqua convenienti extrahitur " mucilago propinanda, ſed raro. *N.* Hoc peculiare præ cæteris purganti" bus habet, quod qualitate refrigerandi ſit præditum, ſecus ac Meſue ſtatuit. " Verum enimvero nec tamen extra reprehenſionem poſitum eſt, quam in" currit ratione virulentiæ ſuæ. *Præp.* Electuarium de Pſyllio. Doſis ʒj." *Schrod.* p. 772.

1. It is inſipid; yet nauſeouſly viſcous, or mucilaginous. I diſcover no acrimony in it. " Semen manſu aut maceratione mucilaginem abunde reddit" *J. B.* Sapor plantæ amarus, odor nullus manifeſtus. *R. H.* 882. " Semina " ſaporis primum mucilaginoſi, poſtmodum acris & nauſeoſi." *Herm. Cynoſ.* p. 330. " Saporis mucilaginoſi, ſimulque acris & nauſeoſi." *Dale* 215. " Dum maſticantur in mucilaginem temperatam abeunt; cortices eorum

" ſunt acres." *Nucl. Belg.* 236. " Pſyllium eſt vel album, vel nigrum, " vel ſubpurpureum: duabus ſubſtantiis compoſitum, medulla ſcil. interiore " calida ſicca ordine 4. acri admodum, incidente rubificante, ulcerante vene- " noſo: cortice vero frigido multum." *Meſue Simpl.* c. 20. fol. 43. which account no ways agrees with our Pſyllium. — 2. Water eaſily extracts plenty of mucilage from it; and conſequently as eaſily dilutes it. Hence it differs much from birdlime; and its viſcidity cannot render it virulent. Its mucilage, in a large quantity, may be ſomewhat offenſive to the ſtomach; but the ſame may be ſaid of gum tragacanth, ſymphytum, althæa. Yet—3. It was of old numbered among poiſons. " Vis ei refrigerans," ſays *Dioſcorides*, l. c. and below, " vehementer refrigerat; ſed & in ferventem aquam immiſſum calorem " reprimit;" and commends it for pains, inflammations, tumors, ulcers; but outwardly only. And Alexiph. c. 10. p. 406. he ſays, " Quod Pſyllium di- " citur epotum corpori toti frigus & torporem infert cum exolutione, & animi " quadam ægritudine anxietateve. According to *Galen (Simpl.* l. 8. p. 64. A.) " Pſyllium ſemen habet admodum utile, ex ſecundo refrigerantium ordine: " in deſiccando vero & humectando medium quodammodo eſt & ſymme- " trum." The *Ill. Boerh.* among the " toxica quæ incraſſando, obſtruendo, " &c. cita vel lenta morte perimunt," has " Pſyllii ſemen cynoſbati ſpon- " gia, fungi, agaricus, viſcum." *Inſtit.* § 1143. But it is commonly uſed in Egypt, eſpecially the mucilage extracted with roſe-water, &c. in all bilious, ardent fevers, pleuriſy, peripneumony, diarrhœa, dyſenteria, &c. vid. *Alpin. de Pl. Aeg.* c. 42. p. 129. & *de Med. Ægypt.* l. 4. c. 1. fol. 118. b. " Utun- " tur frequentiſſimè & ſeminibus Pſyllii, maximeque in febribus ardentibus, " quorum infuſum, ſeu mucilaginem, tutiſſimè propinant ægrotis. Ex quo " proſpicitur errare cum Dioſcoride omnes, qui Pſyllium venenum eſſe ſcri- " bunt; quando ibi tutiſſime, nemine ab eo unquam læſo, Pſyllium aſſumatur." To which if we add, that it is a ſpecies plantaginis, we may conclude that there is nothing virulent in Pſyllium, more than in Symphytum. Meſue makes the ſkin antacrid; but the kernel very acrid, ulcerating, and virulent.

R H U S.

S E C T. I.

Rhus, Rhus obſoniorum, Sumach. *offic.* Rhus folio ulmi. *B. P.* 414. *T.* 611. Rhus coriaria. *Dod.* 779. *Ger.* 1474. Rhus ſive Sumach. *J. B.* i. 555. *R. H.* 1590. Rhus obſoniorum & coriariorum. *Cluſ. H.* 17. Sumach ſive Rhus obſoniorum & coriariorum, *Park.* 1449. Rhus foliis pinnatis, ſerratis. *H. Cliff.* 110. Common Sumach—has ſmall, round, hairy, reddiſh ſeeds, very hard, and of an aſtringent taſte; and no ſmell. It grows wild in South France, Spain, Italy, &c.

The Rhus Virginianum, *B. P.* 517. *T.* 611. *R. H.* 1591. Virginian Sumach is much more common here, and of the ſame nature, being a variety only. " Rhus qui obſoniis aſpergitur, quemque nonnulli erythron appellant, " fructus eſt rhois coriariæ, ſic vocatæ quod ea coriarii ad ſpiſſanda coria utan- " tur. Eſt vero arbuſcula in petris naſcens, binum fere cubitorum altitudine,

" in qua folia ſunt oblonga, ſubrubentia, & in ambitu ſerrata: fructus autem " racemulis ſimilis, denſus, terebinthini magnitudine, quadantenus latus, cu- " jus corticoſa tunica, acinos ambiens, perquam utilis eſt, &c." *Dioſc.* l. 1. c. 147. " Rhus, ῥους, & Hippocrati ῥοος, a coccineo acinorum colore dicitur: " ῥους enim ἐρυθρον interpretantur, unde ruſſus, vox Latina." *B. P.*

" Viburnum." *Matth.* " Rhus coriariorum." *Theophraſti & Plinii Cæſal-* " *pino*, videtur." *B. P.* 429. Hoffman is for writing it Rus, not Rhus, becauſe it is originis Syriacæ (vid. p. 438); which is trifling, ſince adopted a Græcis.

SECT. II.

It is aſtringent; and may be uſed like biſtort, &c. The leaves are of the ſame nature.

" *Officin.* Semen, Folia. Refrigerat 3. ſiccat 2. aſtringit. *Uſus præcip.* in " fluxu alvi, uteri ſeu menſium: hæmorrhoides compeſcit, bilem obtundit. " Extrinſecus reſiſtit putrefactioni ac gangrænæ in paronychio. *N.* Gummi " dentibus inditum odontalgiam ſedat. *Præp.* Succus Sumach, *i. e.* Pulpa " ſine oſſeis ſeminibus." *Schrod.* 663.

As by the taſte, ſo by every experiment, it is as aſtringent as galls or oak bark. The outward ſkin, or pulp, for it may be called a berry, is acid to the taſte. " Grana, cuticula acidi ſaporis ſunt obducta. *J. B.* Notat Sylvius " Rhois ſuccum eſſe vice omphacii in Gallia Narbonenſi." *R. H.* 1591. It was an ingredient in the ſyrupus myrtinus. But this ſyrup is omitted in *Ph.* edit. 1744. as it is alſo in *Ph. Lond.* together with the unguentum e Sumach.

SANTONICUM.

SECT. I.

Santonicum, Semen Sanctum, Semen Lumbricorum. *offic.* (*aliis* Semen contra, Sementina & Semen Zedoariæ.) Abſinthium Santonicum Alexandrinum. *B. P.* 139. *R. H.* 368. Abſinthium Santonicum Alaxandrinum ſive Sementina, & Semen Sanctum. *Park.* 102. Semen Zedoariæ Belgis. *Lob. Adv.* 337. Sementina. *Dod.* 27. *Ger.* 1100. Lumbricorum ſemen vulgare, & Matthioli. *J. B.* iii. 180. Semen contra, Semenzina, Sementina, Semen Sanctum, Santolina. *offic. Geoff.* ii. 466. The Common Worm-Seed.—This looks like a coarſe vegetable powder, conſiſting of ſeveral ſmall ſcales incloſing one another, eaſily ſeparable, with fragments of leaves and ſtalks among them; but not like ſeed though viewed with a microſcope; the whole being very friable, of a greeniſh yellow (or browniſh) colour, of an aromatic bitter taſte, and pretty fragrant ſmell.

It is brought from the Levant; but what plant it belongs to, and where it grows, authors are not agreed. " Ex Alexandria adfertur." *Dale* 100. " It " is brought to us from Alexandria and Smyrna, and is ſaid by Rauwolf to " grow about Bethlehem in Judea." *Miller's Bot.* 392. " It grows in the " meadows in the kingdom of Boutan." *Lemery's Dict.* p. 500. " It comes

" from Perſia, and the confines of Muſcovy, to Aleppo, Scanderoon, and " Smyrna, whence the French, Engliſh, and Dutch bring it." *Savary's Dict.* i. 267. " It comes to Marſeilles from Perſia, by Smyrna and Aleppo, from " 80 to 100 quintals annually." *Savary's Dict.* iii. 431.

" Nulla quidem res in officinis magis uſitata, & cujus origo minus cognita " ſit. Dubitant adhuc num ſemen ſit, vel capſula ſeminalis, vel foliorum aut " florum germina? Quænam ſit planta quæ eam proferat, an Zedoaria, an " Abſinthii, an Abrotani ſpecies, an Chamæcypariſſus? Num in Galliâ pro- " veniat, in Palæſtinâ, in Ægypto, vel in Perſiâ, aut in ſolo regno *Boutan*, " in Indiâ orientali remotiſſimâ." *Geoff.* ii. 466. Some make it an Abſinthium, others an Abrotonum, Santolina, Tanacetum, &c. all with equal certainty. " It ſeems to be only the young buds of the flowers of ſome Abro- " tanum mas, rather than a wormwood, both from the ſmell, which comes " nearer to that, and becauſe there may be ſeen a great many fragments of " ſouthernwood, like leaves among it, before it be garbled." *Miller's Bot.* 393. I have ſeen alſo ſomething like down within the ſmall ſcaley heads. " Paulus " Hermaus Abrotoni ſpeciem eſſe cenſet, quæ in Perſia, &c. reperitur. Cum " quo conſentire videtur celebris peregrinator Tavernerius." *Geoff.* ii. 467. where ſee this traveller's way of collecting it in the kingdom of Boutan, which to me ſeems fabulous. In *Lin. Sp. Plant.* p. 845. there is deſcribed briefly an artimeſia, foliis caulinis linearibus pinnato multifidis, ramis indiviſis, ſpicis ſecundis reflexis, which he calls Santonicum N. triv. and makes the ſame with ſemen ſanctum. *Lob. Ic.* 746; though here the folia are not pinnata, and the rami multifidi. *Obiter.* Are the terms here uſed very plain? " Spica ſecunda " floribus ad unum idemque latus verſis." *Lin. Ph. Bot.* p. 41.

" Satum nonnullis in locis vidimus ſemen peregrinum iſtud, ex quo fruti- " culus ſurculoſus enatus fuit, undequaque ſeminibus gliſcens, pluribus ferme " quam foliis." *Lob. Adv.* 337. " Reticere nequeo quod mihi contigit. Bis " ſemen terræ commiſi quod in officinis ſeminis ſancti nomine venditur, bis " ex eo nata nobis tanaceti genus, cujus effigiem adſculpendam curavi: differt " a vulgato, quod folia ſint minus viridia, ſed candidiora paulum." *Bod. in Theoph.* p. 1151. " Pluries illud (ſemen ſanctum vulgo dictum) ſevimus, " ſed nunquam potuimus natum videre. E Monac. in Meſ. *J. B.* iii. 181. " Aliquoties ſevi ſemen lumbricorum Montbelgardi, in horto Ill. E. C. & aliis " locis, ſed non mihi provenit; ita ut Lobelium vagum & inanem jactatorem " dixerim." *J. B.* iii. 182.

One of Dioſcorides's Abſinthia is Santonicum, from a province in France: hence ſemen Santonici, & ſemen ſanctum: and from ſemenza in Italian comes ſemenzina, the diminutive " quod imperiti corrumpunt in ſementina, in ſemen- " zinæ, ſeu zedoariæ." *Hoffman*, p. 82. It is evidently a ſeed with *Dr. Hill.* The *New Diſp.* p. 199. makes it one too.

SECT. II.

This agrees with abrotonum in virtues; but is uſed as an anthelmintic only: and is given to ʒj. in any convenient vehicle. It is an ingredient in the pulvis vermifugus.

ʒ. *Officin.*

Officin. "Semen, quod affertur ex Alexandria Ægypti. Calfacit & ſiccat, "ſaporis amari eſt. *Uſus* in lumbricis cujuſcunque generis enecandis, fugandis & expellendis. *Præp.* 1. Semen Santonicum præparatum, *i. e.* in aceto "deſtillato (diebus 45.) maceratum atque exiccatum. 2. Confectio ſeminis "cinæ." *Schrod.* 673.

1. It is aromatic, bitter and ſomewhat acrid, and of a ſtrong ſmell. "Amara ſunt cum acrimonia, & odore graviuſculo." *J. B.* "Saporis amari "aromatici, fere inſtar radicis zedoariæ, ſicut etiam odoris." *Nucl. Belg.* 256. "Sapore ingrato, amaro, cum acrimonia quadam aromatica; odore aromatico, "graviuſculo & nauſeoſo." *Geoff.* ii. 466. — 2. A decoction of it actually kills worms. "Seminis ſancti amplam & validam infuſionem fieri curavi in aqua "communi calida, eamque duabus horis in Mariano balneo reliqui. Poſt"quam vero perfrigida facta eſt, in eam, non educto ſemine, conjeci quatuor "lumbricos, qui intra ſeptem horas mortui ſunt. Poſt hæc infuſionem illam "pari aquæ communis copia dilui; & quatuor alii lumbrici in eam conjecti, "intra octo horas interierunt." *Redi de Animal viv.* p. 159. "Baglivius ob"ſervat eſſe mortuos ante quinque horas. Datur in ſubſtantia a 3ß. ad 3j. "cum melle vel lacte." *Albin. MS.* But aqua graminis killed the worms much ſooner. *Mr. Geoffroy* gives its chymical principles without an analyſis. "The only uſe it is put to is to deſtroy worms in children, being mixed with "treacle, or ſome ſweet vehicle, in which it is uſually put whole, without "bruiſing or powdering." *Miller's Bot.* 393. However it is now excluded the London M.M. *Boerhaave* ordered Santonicum with other bitters in wine, for a tertian.

SESELI.

SECT. I.

1. Seſeli, Seſeli vulgare, Siler, Siler montanum. *offic.* Liguſticum quod Seſeli officinarum. *B. P.* 162. *T.* 323. Seſeli, ſive Siler montanum vulgare. *J. B.* iii. 2, 168. Siler montanum. *Dod.* 310. *Cluſ. H.* ii. 195. *H. Ox.* iii. 276. Siler montanum officinarum. *Lob.* 425. *Ger.* 1048. *R. H.* 439. Siler montanum, vulgo Seſelios ſive Liguſticum verum. *Park.* 909. Laſerpitium foliis lanceolatis, integerrimis, petiolatis. *H. Cliff.* 96. Mountain Siler, or Common Hartwort.—This has oblong, ſtriated and margined brown ſeeds, of a hot, bitteriſh, aromatic taſte; and fragrant ſmell.—It grows in the mountains about Geneva, upon the Alps, &c. In gardens it flowers in June. It is generally taken for the Liguſticum *Dioſcoridis*, l. 3. c. 58. p. 198. though the deſcription does not well agree to it. "Siler nunc appellant, nomine a Sile deducto, quia "pro Seſeli ſemine utuntur; at veteres ipſum Seſeli etiam Sili & Seli voca"bant." *B. P.* Dioſcorides has four Seſelis, *viz.* Maſſilienſe, Æthiopicum, Pelopenenſe, & Tordylium quod aliqui Seſeli Creticum vocant. *vid.* l. 3. c. 60, 61, 62, 63; about which authors not being well agreed; and the Siler montanum, ſo far as appears, being inferior to none of them ("Bodæus ſemen Sileris "majoris acredinis eſſe ſcribit quam ullum Seſeli." *R. H.*) it may ſuffice for all; as it does in *Ph. Lond.* 1721. and 1746. *Our* diſpenſatory uſes the

Seſeli

Seſeli Maſſilienſe. *Dale* has two Seſeli Maſſilienſes, off. one p. 116. and another p. 129: the laſt of which is the following,

2. Seſeli Maſſilienſe. *offic.* French Hartwort, or Hartwort of Marſeilles. —The ſeed is ſmall and ſtriated like fennel ſeed, of a light greeniſh colour, of an acrid aromatic taſte, and ſomewhat aromatic ſmell, but neither very pleaſant. It is ſuppoſed to be the ſeed of the fœniculum tortuoſum. *J. B.* iii. 2, 16. *T.* 311. *R. H.* 460. Seſeli Maſſilienſe, fœniculi folio, quod Dioſcoridis cenſetur. *B. P.* 161 *Park.* 903. Seſeli Maſſilienſe. *Ger.* 1051. Seſeli Maſſilienſe Dioſcoridis. *Cluſ. H.* ii. 193. Œnanthe, ſtriata, rigida. *H. Cliff.* 99. Saxifraga montana minor, fœniculum tortuoſum dictum. *H. Ox.* iii. 273. It grows in Provence, Sicily, &c. *Dale*'s other Seſeli Maſſilienſe. *offic.* is the Seſeli Maſſilienſe, ferulæ folio. *B. P.* 161. Seſeli Maſſilienſe, *Ger. R. H.* 414. Seſeli Maſſilienſe nuperorum folio aliquatenus viſnagæ. *J. B.* iii. 2, 33. Seſeli Maſſilienſe alterum. *Ger.* 1051. Libanotis Maſſilienſis, ferulæ folio. *H. Ox.* iii. 310. Italian Hartwort: which I find not in *T. B.* nor *H. Cliff.* According to *Schroder* the ſeed of either is uſed indifferently.

SECT. II.

The Siler is an acrid aromatic attenuant, diaphoretic, diuretic and carminative; called ſtomachic, uterine and alexipharmic; and commended in phlegmatic and flatulent diſeaſes of the ſtomach and guts, in obſtructis menſibus & lochiis, in partu difficili, hyſteric fits, convulſions, &c.

The Seſeli Maſſilienſe is reckoned of the ſame nature, though inferior in efficacy. One or other of them is in the Mithridat. and Theriaca.

" Seſelios officinarum ſemen, calfacit, ſiccat, menſes & urinas ciet, flatus " diſcutit." *Schrod.* 682.

" Seſeli Maſſilioticum calfacit & ſiccat ad gr. uſque 3, incidit, aperit, diſ- " cutit. *Uſus præcip.* in morbis capitis, epilepſia, imbecillitate viſus, ſpaſmo, " &c. in pulmonum ac pectoris affectibus, tuſſi, catarrhis; in epatis obſtruc- " tione, hydrope, ventriculi cruditate ac inflatione, in calculo renum ac veſi- " cæ, in menſibus obſtructis. Specifica antidotus eſt cicutæ. Extrinſecus in " ſpaſmo, contractis, in lacte mammarum coagulato, in uteri impuritate ac " obſtructione." *Schrod.* p. 683.

They are aromatic, ſomewhat bitter, and fragrant oily ſeeds. " Sileris " ſemen, ſapore acri & ſubamaro, veluti corticis aurantii, tandem ad Cymini " ſaporem accedente." *J. B. R. H.* " Saporis acris amaricantis aromatici, " quaſi ex corticibus aurantiorum & cumino mixti." *Herm. Cynoſ.* 294. *Dale* adds, " Odoris fragrantis." p. 123. " Saporis valde calidi, & ſubamari, fere " inſtar terebinthinæ, ſicut etiam odoris." *Nucl. Belg.* 273. " Fœniculi tor- " tuoſi tota planta odorata eſt; ſemen ſubamarum, calidum manifeſte." *J. B.* " Seſelios Maſſilienſe ſemen odoris fortis, aromatici; ſaporis valde acris & " calidi." *Nucl. Belg.* 273. vid. *Bod. in Theoph.* p. 1126.

LEC-

LECTURE LXX.

SINAPI.

SECT. I.

1. SINAPI, Sinapi nigrum. *offic.* Sinapi rapi folio. *B. P.* 99 *T.* 227. *H. Ox.* ii. 215. Sinapi ſativum prius. *Dod.* 706. Sinapi ſiliqua latiuſcula glabra, ſemine ruſſo, ſive vulgare. *J. B.* ii. Sinapi ſativum ſecundum, *Ger.* 243. *R. H.* 803. *Syn.* 295. Sinapi ſativum rapi folio. *Park.* 831. Sinapis, ſiliquis glabris, tetragonis. *H. Cliff.* 338. Black or Common Muſtard.—The ſeed needs no deſcription, being well known.

It is ſowed in gardens, banks of ditches, &c. and flowers in June. Is it a native of Britain? "In hortis & areis, inque foſſarum aggeribus, & terra "recens & effoſſa ſponte & copioſiſſime exit." *R. H.*

2. Sinapi album ſiliqua hirſuta, ſemine albo vel ruſſo. *J. B.* ii. 856. *R. H.* 852. *Syn.* 295. White Muſtard—which may be uſed indifferently with the black. Dioſcorides does not deſcribe it; but ſeveral characters of it are to be met with in Theophraſtus. vid. *Bod. in Theoph.* p. 796.

"Σινᾶπι, σινηπι Dioſcoridi, l. 2. c. 184. (p. 151.) et Theoph. 7. hiſt. 3 et "6. παρα τὸ σινεσθαι τὸς ὀπας, oculos enim lædit: dicitur etiam Theoph. νᾶπυ "quaſi immite, ob vehementem ejus acrimoniam: & Athenienſes napy ap-"pellaſſe Plin. l. 19. c. 3. author eſt, Sinapi nominans. Unius Dioſcorides "& Theoph. meminere: at Plinius genera tria facit: unum gracile, alterum "ſimile rapi foliis, tertium erucæ." *B. P.*

SECT. II.

It is very acrid, antacid, attenuant, and diuretic, like horſe-radiſh; called ſtomachic, and lithontriptic; and is commended inwardly in the ſcurvy, dropſy, lethargy, palſy, agues, and all cold phlegmatic or leucophlegmatic diſeaſes; and outwardly as an epiſpaſtic, or ſinapiſm, cum aceto miſtum.

"Calfacit et ſiccat 4. incidit, attenuat, attrahit, rubificat. *Uſus præcip.* in "appetitu excitando, chylificatione promovenda: in affectibus hypochondria-"cis ac quartana ex mucilagine tartarea; item in quotidiana, (ante paroxyſ-"mum doſ. ʒj. exhibita) in calculo; caput purgat. Extrinſecus in ſinapiſmis, "in arcendo caro (vel naribus inditum,; tumores maturos aperit, ſternutatio-"nem movet. *Præp.* Oleum, ex ſem. expreſſum," *Schrod.* 684.

1. It is of a very hot, biting, bitteriſh taſte; and pungent ſmell when bruiſed. Every body knows how, even in the mouth, Muſtard affects both the noſe and the eyes. The leaves are fully as acrid as the ſeed. "Saporis acerrimi "& calidiſſimi." *Nucl. Belg.* 274. "Sapor foliorum, ſed præcipue ſeminum, "fervidus et acerrimus; attritaque acri odore nares feriunt." *R. H.* 802. yet its expreſſed oil is not acrid. — 2. It abounds with a volatile alcali, and is alcaline. "Semen optimum Sinapis, ſolum contritum, affuſo acerrimo aceto

"effer-

" efferveſcere memini," *Boerh. Chem.* ii. 142. " Muſtard ſeed, by a chemical " analyſis, gives much more indication of an acrid ſalt than of an acid; but " they draw from it a very conſiderable quantity of oil, very little fixed ſalt " ſimply ſaline, much earth, little urinous ſpirit, no volatile ſalt." *T. hiſt.* p. 363. See the analyſis more accurately performed in *Boerh. Chem.* ii. proceſſ. 33. — 3. Externally applied it heats, inflames, bliſters the ſkin: and hence many ways uſeful. Thus Dioſcorides commends it (as an apophlegmatic maſticatory, errhine, epithem, cataplaſm) in epileptic and hyſteric fits, lethargy, ſciatica, ſpleen, " ac in univerſum, ad quemvis diutinum dolorem," for baldneſs, tetters, leproſy, deafneſs, dimneſs of ſight, &c. — 4. Internally it is much uſed in the ſcurvy, dropſy, palſy, &c. *(vid.* raphanus ruſticanus*)*: and ſometimes as a vomit. " Semen Sinapeos in mortario tritum & cum vino " albo mixtum, multas centurias ſcorbuticorum & languentium hominum in " obſidione Rupellenſi ſanitati reſtituit. Plerique enim obſeſſorum, fame & " inedia preſſi, multa ſordida, & quæ natura abhorret, eſitare coacti, reſpirandi difficultatem, gingivarum putredinem, dentium nigritiem & vacillationem, aliaque ſcorbuti ſymptomata contraxerant, unde multi moriebantur; " donec tandem Sinapi in foſſis circa urbem copioſe inventum, & quo dictum " eſt modo adhibitum omnes liberavit. Ex relatione D. Mervault, qui toto " obſidionis tempore in urbe manebat." *R. H.* 803 and 804. where we find a man very ſubject to a vertigo and apoplexy, who uſed muſtard ſucceſsfully as a preſervative. Why is vinegar mixed with Sinapi in Sinapiſms?

STAPHISAGRIA.

SECT. I.

Staphiſagria. *offic.* Staphiſagria. *B. P.* 324. *Dod.* 366. *Matth.* 850. *Lob.* 393. *Ger.* 495. *Park.* 222. *J. B.* iii. 641. *R. H.* 705. *H. Ox.* iii. 465. Delphinium platani folio, ſtaphis agria dictum. *T.* 428. Delphinium nectariis diphyllis, foliis palmatis, laciniis fere integris. *H. Cliff.* 213. Staves-acre or Louſe-wort. —This has large, wrinkled, angular ſeeds, of a blackiſh colour; of an acrid, burning hot taſte, and no ſmell.

It grows in Italy, flowering in June. " Staphiſagria, σταφις αγρια Dioſcoridi, l. 4. c. 156. p. 301. Aſtaphis agria, ſive ſtaphis Plinio, l. 23. c. 1. " Latinis herba pedicularis ab effectu. In Græcia nunc φθειροκοκκον, granum " pedicularium nominatur." *B. P.* " Quidam pituitariam vocant." *Plin.* l. 23. c. 1. p. 589. Dioſcorides's deſcription agrees pretty well with this plant, only I ſee not how it can be ſaid to bear a flower like that of the iſatis.

SECT. II.

It is ſaid to be emetic and cathartic; but ſo dangerous, that it is uſed only outwardly, in maſticatories, ſinapiſms, epithems, for the tooth-ach, palſies, phthiriaſis, &c.

" Inter-

" Internus uſus purgatorius eſt, ſed rarus. Extrinſecus ejus uſus eſt apo-
" phlegmatiſans, in maſticatoriis, gargariſmis odontalgicis (cum aceto) ac ab-
" ſtergentibus, in ulceribus et papulis, &c. adhibetur et in phthiriaſi." *Schrod.* 687. " Purgat, ſed cum metu ſtrangulationis, ideo deſiit uſus ipſius. Dioſ-
" corides in id dat gr. x. aut xv." *Hoffman*, p. 448.

It is not only exceſſively acrid, or cauſtic, but alſo ſuſpected of virulency. " Vehementer calidam, acrem & cauſticam obtinent facultatem, inquit Gale-
" nus, l. 8. Simpl. *Hoffman*, p. 448. " Interne eſt venenum fere inſtar ole-
" andri." *Nucl. Belg.* 278. " Uridæ facultatis vi guſtatu os incendunt." *R. H.* " Saporis acris & fervidi, exurentis, ingrati & nauſeoſi odoris." *Dale* 179. Yet *Sylvius de la Boe* fancies it may be of uſe in lue venerea, inwardly taken a gr. xii. ad ʒj. vid. *Meth. Med.* l. 2. c. 13. § 59, 60. or *R. H.* 705; though any ſalivation excited thus can do no good in that diſeaſe.

THLASPI.

SECT. I.

1. Thlaſpi verum. *offic.* Thlaſpi arvenſe ſiliquis latis. *B. P.* 105. *T.* 212. *H. Ox.* ii. 293: only it is here ſiliculis, in place of ſiliquis. Thlaſpi latius. *Dod.* 712. Thlaſpi Dioſcoridis. *Ger.* 262. *R. H.* 831. *Syn.* 305. Thlaſpi ſiliquis orbiculatis, foliis oblongis, glabris. *Fl. Lap.* 209. Thlaſpi drabæ folio. *Park.* 835. Thlaſpi ſiliquis orbiculatis, foliis oblongis, dentatis glabris. *Fl. Lap. H. Cliff.* 330. Treacle-Muſtard, or Penny-Creſs;—which bears a ſmall, roundiſh, black ſeed, ſomewhat flatted and marked with concentrical oval ſtriæ, of an hot, biting, bitteriſh taſte; with the flavour and ſmell of garlic. " Se-
" mina rotunda, cum ſtriis circularibus, ſaporis acris." *J. B.*

This is ſuppoſed to be the Thlaſpi Dioſcoridis, l. 2. c. 186. p. 152. It grows wild in ſeveral places of Britain. In gardens it ſows itſelf ſo plentifully as to become a troubleſome weed. " The ſeed of this plant is what ought
" to be uſed in the theriaca and mithridate; but, being ſcarcely to be had,
" the ſeed of the Thlaſpi vulgatiſſimum. *Ger.* may be uſed as a ſuccedaneum
" for it." *Miller's Bot.* 436. The *Pharm. Lond.* ed. 1721. and *Ph. Edinb.* have but one Thlaſpi, *viz.* Thlaſpi arvenſe ſiliquis latis. *B. P.* but the Thlaſpis ſemen of the *New London M. M.* is either Thlaſpis arvenſis, ſiliquis latis, vel Thlaſpis arvenſis vaccariæ incano folio majoris. *C. B.* That is,

2. Thlaſpi vulgatius. *J. B.* ii. 921. *T.* 212. *R. H.* 830. *Syn.* 305. Thlaſpi arvenſe, vaccariæ incano folio, majus. *B. P.* 106. *H. Ox.* ii. 294. T. alterum. *Dod.* 712. T. vulgatiſſimum. *Ger.* 262. T. mithridaticum ſive vulgatiſſimum, vaccariæ folio. *Park.* 835. " Thlaſpi. *Chab.* 29. Thlaſpi vulgare.
" offic. *Merc. Bot.* i. 72. *Phyt. Brit.* 120." *Dale* 207. Thlaſpi ſiliculis ſub-
" rotundis, foliis ſagittatis, dentatis, incanis. *H. Cliff.* 330. Mithridate Muſtard;—the ſeeds of which are ſmaller than the former, of a brown or reddiſh-brown colour, and hot biting taſte, like ſinapi or naſturtium.

" The ſeed of this Thlaſpi is generally uſed inſtead of the former." *Miller's Bot.* 437. " Genera varia ſunt, eaque promiſcue uſualia. Præferuntur tamen
" arvenſia." *Schrod.* 691. Hence, there being many ſpecies Thlaſpios, au-

thors vary in deſcribing the ſeed. " E multis Thlaſpios ſpeciebus, nulla datur " quæ æquè congruat, aut conveniat Dioſcoridis Thlaſpios delineationi, ac hoc " Thlaſpi πλατυ καρπον. . . Semina ejus nigra, acria, guſtu ferventia, allium " nonnihil reſipientia. . . Thlaſpios vulgatiſſimi. *Ger.* ſemina ruffa, mordacia, " acria, naſturtii hortenſis ſeminibus ſimilia," ſecundum *H. Ox.* locis citatis. Parkinſon alſo obſerves, that the treacle-muſtard ſeeds are of a blackiſh-brown colour, ſomewhat ſharp in taſte, and of the ſmell of garlic: the ſeed of Mithridate-Muſtard being brown, ſmaller, and much ſharper in taſte.

" Thlaſpi eſſe ἀπο τȣ θλᾶν, etiam Galen. 1. antidot. 14. indicat, feciſſe " Græcos in genit. non θλασπεως, ſed θλασπιδος, indicio ſit diminutivum " θλασπιδιον, quod idem eſſe cum primitivo ſæpe dixi. Ingreditur hoc ſemen " theriacam. Sed quid ſumendum? Quatuor ex arvenſibus ſunt apud Bau- " hinum." *Hoffman* 452. In *Dioſcor.* l. 2. c. 186. is περι θλασπεως, p. 152: and in *Celſus*'s Antidotum Mithridatis it is *Thlaſpis* in genitivo.

SECT. II.

It is acrid, antacid, attenuant, and diuretic like naſturtium or alliaria: but it is ſomewhat milder than Muſtard, and may be uſed the ſame way. It is commended for the ſcurvy, dropſy, gout, ſciatica, internal abſceſſes to forward their breaking, &c. but is little uſed except in the Mithridate and Theriaca, and, conſequently, in the aqua & acetum Theriacale.

" Calfacit & ſiccat 4. abſtergit. *Uſus præcip.* in internis abſceſſibus rum- " pendis, menſibus ciendis, iſchiaticis affectibus curandis. Extrinſecus ab- " ſtergit ulcera quæcunque manantia; inſuperque ptarmicum eſt, ſed minus " vulgare. *N.* Gravidis, quia fœtum necat, infenſum cenſetur." *Schrod.* 691. In *Boerh. Lib. de M. M.* it ſtands among the antacida.

It is hot, biting, bitteriſh; and though while entire it laſts ſome years, yet bruiſed or boiled it ſoon loſes its acrimony. " The ſeeds are ſharp in taſte, burning the tongue as doth muſtard-ſeed, leaving a taſte or ſavour of garlic behind for a farewell." *Ger.* 261.

TRITICUM.

SECT. I.

Triticum. *offic.* Triticum hybernum, ariſtis carens. *B. P.* 21. *Theat.* 352. *T.* 512. *H. Ox.* iii. 175. Triticum. *Dod.* 489. Triticum vulgare glumas triturando deponens. *J. B.* ii. 407. Triticum ſpica mutica. *Ger.* 65. *Park.* 1120. *R. H.* 1236. *Syn.* 386. Siligo ſpica mutica. *Lob.* 14. Triticum radice annua, ſpica mutica. *H. Cliff.* 24. Wheat, white or red, without awns.

Where it grows naturally I know not. For the Triticum ſylveſtre Creticum *B. P.* ſeems to reſemble the grains of rye more than wheat. vid. *R. H.* 1240. However it is cultivated every where in Europe. It is (α.) one, at leaſt, of the moſt fertile grains. " Tritico nihil eſt fertilius: hoc ea natura tribuit, " quoniam eo maxime alat hominem." *Plin.* l. 18. c. 10. where he mentions

near 400 germina from one grain, which was sent from Byzantium to Augustus, &c. (β.) It suffers cold as well as heat: it thrives in our northern countries very well; and also in Africa, East-Indies, &c. if the soil be not too rich and fat. vid. *R. H.* 1238. (γ.) If sowed before the winter, neither drought nor heat ever spoils its crop: hence the proverb in Britain, *Dearth came never after drought.* vid. *R. H.* 1238.

" Triticum, πυρος dicitur Græcis, quasi σπυρος pro σπορος, ἀπο τȣ σπειρειν, " secundum etymologicum." *B. P.* 20. *Dioscorides*, l. 2. c. 107. περι πυρων, p. 124. But *Bodæus in Theoph.* p. 934. b. has made a sort of description out of what Theophrastus has said in several places concerning it. See there the etymons, and various learned criticisms ad p. 936. It is called also σιτος, *i. e.* Cibus & Frumentum a fruendo.

SECT. II.

It is acescent, antiseptic, and nourishing. And rightly prepared wheat-bread may be reckoned as wholesome, both in sickness and health, as any food whatsoever: outwardly applied it softens, and discusses or suppurates tumors; eases pains, cleanses the skin of scurf, scabs, &c.

" *Officin.* Semen, ejusque farina & furfures. *Vires.* Moderatè calfacit, " emollit, maturat, discutit: internus ejus usus cibarius est, multum enim ac " bonum nutrimentum suppeditat; incrassat, & obstruit. Extrinsecus adhi- " betur (farina) in tumoribus molliendis, leniendis, &c. in oculorum inflam- " mationibus & fluxionibus (cataplasmatis forma imposita) in erysipelate poda- " gricisque doloribus leniendis (sicca farina imposita) furfures absergunt squa- " mulas capitis, leniunt dolores (in cataplasm. aut sacculis.) Triticum tri- " mestre inservit amylo conficiendo. *Præp.* 1. Aqua stillat. ex pane in M. B. " sistit fluxus alvi in infantibus, &c. 2. Oleum tritici per descensum, sed " inusitatum est." *Schrod.* 694.

It is, and has always been, more used in food than in medicine; and the bread made of it generally preferred to that of any other grain: but whether bread made of the finest flower or of the coarsest, of the leavened or unleavened, be preferable for common use, is controverted; though in my opinion not difficultly determined. " Farinæ confusaneæ minus quidem nutriunt, magis " autem alvum dejiciunt puræ vero plus nutriunt, minus autem per alvum " secedunt." *Hippoc. de Vict. rat.* l. 2. p. 355. l. 24. The reason is obvious; as is that also in what circumstances coarse bread is preferable to the fine. " Concoctu autem inter panes sunt facillimi, qui plurimum sunt fermentati, " & pulcherrime subacti, quique in clibano igne moderato fuerunt assati. . . . " Panis is athletæ quidem est accommodus, qui neque belliſſimè est assatus, " neque multum habet fermenti: privato autem & seni, qui belliſſimè quidem " in clibano est assatus, fermenti autem habet multum: porro qui fermento " omnino caret, nemini prorsus est accommodus." *Galen de Alim. facult.* l. 1. c. 2. p. 9. H. The fermenting or leavening of flour attenuates its viscidity, and facilitates its concoction in weak and lax constitutions, in the lazy and indolent: but as the active and laborious need not this assistance from art; so unleavened grain proves the more medicinal to the hot and choleric constitu-

tions and diſeaſes. Again, ſome think barm makes bread the worſe; but without all reaſon: for it is nothing but the natural fermentum hordei, which both facilitates and ſhortens much the fermentation or leavening of bread." " Galliæ & Hiſpaniæ frumento in potum reſoluto, quibus diximus generibus, " ſpumâ ita concretâ pro fermento utuntur. Qua de cauſa levior illis quam " cæteris panis eſt." *Plin.* l. 18. c. 7. For a more full account of this grain, of its preparations, and uſes among the ancients; of the chondrus, alica, far, althera or althara, &c. vid. *B. Theat.* col. 351. ad 410.

As for bran, all its virtues depend on the farina adhering to it. The amylum is the pureſt farina, freed from all the bran, and much of its oily and ſaline parts; ſo is more glutinous, antacrid, and incraſſating, than the farina itſelf.

Among the 41 *problemata de pane* propoſed & ſolved by the learned *Renatus Moreau*, M. D. in his *Animadverſions on the Schola Salernetana* (printed at *Paris* in 1625. 8vo. in Latin) one (N°. 12.) is, " Cur in Scotia optimus omnium " panis eſſe dicitur?" And after ſeveral conjectures he reſts in Scaliger's opinion as to the effect of ſnow in meliorating the earth, to which the goodneſs of our bread may be owing. *vid.* p. 291. But certainly the grain is as good, or rather better, in England or France. The ſweetneſs therefore of our barm, little hops being uſed in our common malt liquors, may anſwer the queſtion better, if the ſuppoſition be true, and if hop'd liquors were common in every other country.

URTICA.

SECT. I.

1. Urtica, urtica vulgaris. *offic.* Urtica urens maxima. *B. P.* 232. *T.* 534. *H. Ox.* iii. 434. Urtica urens altera. *Dod.* 151. Urtica vulgaris major. *J. B.* iii. 445. *R. H.* 160. Urtica urens. *Ger.* 706. Urtica major, vulgaris, & media ſylveſtris. *Park.* 440. Urtica racemoſa major, perennis. *R. Syn.* 139. Urtica foliis oblongo-cordatis (dioica) fœmina. *H. Cliff.* 440. Urtica foliis cordatis, amentis cylindraceis, ſexu diſtincta. *Fl. Lap.* 299. Common great ſtinging Nettle.—This is common every where. It bears ſmall, ſmooth, roundiſh, pale ſeeds, of a farinaceous, ſubacrid, weak taſte, and no ſmell; which are frequently uſed; as are alſo ſometimes the roots and leaves.

2. Urtica Romana. *offic.* Urtica urens, pilulas ferens, prima Dioſcoridis, ſemine lini. *B. P.* 232. *T.* 535. Urtica urens prior. *Dod.* 151. Urtica Romana ſive mas, cum globulis. *J. B.* iii. 445. Urtica Romana. *Ger.* 706. *Park.* 440. *R. H.* 161. Urtica pilulifera facie Urticæ vulgaris, ſemine lini. *H. Ox.* iii. 435. Urtica pilulifera folio profundius, Urticæ majoris in modum ſerrato, ſemine magno lini. *R. Syn.* 140. Urtica amentis fructiferis, globoſis, androgyna. *H. Cliff.* 440. Roman Nettle.—It has ſeed much like lin-ſeed, only a little ſmaller and darker-coloured, and taſting like the former. It grows in ſeveral places of England; flowering in June and July.

It is ἀκαλυφη in *Theophr.* 7. hiſt. 7. & *Dioſcor.* l. 4. c. 94. p. 281. Urtica, *Plin.* l. 21. c. 15. & l. 22. c. 13 & 14.

SECT.

SECT. II.

The ſeeds are reckoned emollient and diuretic; called pectoral and vulnerary; and commended in the gravel, cough, conſumption, and hæmorrhages. The leaves and roots of the firſt are ſaid to purify the blood; and to be proper in the ſcurvy, internal ulcers, obſtructions in the viſcera, &c. They may be uſed in decoction, or infuſion like tea; and the ſeeds in emulſions.

" *Officin.* Urticæ maximæ radix, ſemen, folia; minoris herba; Romanæ " ſemen. *Vires.* Urtica omnis calfacit moderate, & ſiccat 2. partium tenuium " eſt, aperit, incidit, abſtergit, emollit, diuretica eſt & lithontriptica, pecu- " liariterque cicutæ adverſatur & hyoſcyamo. Radix (Urticæ maximæ) com- " mendatur maximopere ad icterum. Herbæ uſus in gangræna (decocta & " propinata). Eadem in olere ſumpta ſolvit alvum, abſtergit renes, calculos " expellit, expectorationem, morbillorumque eruptionem promovet. Semen " (Romanæ) uſus crebri eſt in pulmonum affectibus, aſthmate, tuſſi contu- " maci, pleuritide, peripneumonia. Extrinſecus reprimit Urtica uvam in- " flammatam (in gargaris.) Sedat hæmorrhagiam narium (Urtica minor. *ſcil.* " contuſa, vel & ſuccus ejus expreſſus naribus inditus;) gangrænam mundifi- " cat. *N.* 1. Noverunt & chirurgi urentis Urticæ fricatu ſanguinem allicere, " adeoque atrophiæ ſubvenire. *N.* 2. Prurigini ab Urtica introductæ mede- " tur oleum olivarum." *Schrod.* 704.

1. Theſe are not acrid, ſcarcely aſtringent in any part, but ſomewhat detergent; and the ſeeds oily. " Urticæ maximæ ſemina ſaporis ſubacris & tenuis: " Romanæ ſaporis ſubacris, pinguis, cum quadam tenuitate." *Herm. Cyn.* p. 315. " The leaves of theſe (three) nettles are of an inſipid glutinous taſte, " and do not redden the blue paper; the roots redden it but little. They are " alſo inſipid, but a little ſtyptic. . . By a chymical analyſis there are got from " nettles ſome volatile ſalt, much ſulphur and earth, with ſeveral liquors which " give greater indication of an acrid ſalt than of an acid. Hence deterſive, " diuretic, &c." *T. Hiſt.* p. 375. Yet it ſeems to have been more uſed as an aſtringent inwardly than any other way. For—2. Dioſcorides commends the Urticæ ut. for bites of dogs, foul ulcers, gangrenes, tumors, ſpleen, bleeding of the noſe, procidentia uteri, &c. N. B. Folia trita, &c. outwardly: and as laxative, pectoral, and menagogue, inwardly. " Semen autem expaſſo " potum Venerem ſtimulat, vulvamque aperit: cum melle de linctum orthop- " nææ, pleuritidi, peripneumoniæque prodeſt; thoracem purgat." *Dioſcorid.* l. 4. c. 94. p. 281. Yet the moderns ſeem moſt to value it in hæmorrhages, as in hæmoptoes, too great flux of blood from the piles, (vid. *R. H.*) dyſentery, fluor albus, vomiting or piſſing of blood, &c. although they commend it alſo in the jaundice, obſtructions of the menſes, irregular gout, contractions of the nerves, &c. (vid. *T. Herm. Boecler.* &c.)—*Verba*, it is too much commended in too many diſeaſes to let us know what it is really good for.

" Nunc ſi velis manus ſimul atque faciem teneram albamque efficere cape, " authore Fallopio, Urticæ folia et radices: decoque in aqua, iiſque manus " faciemque ablue; tum pulchram reddes albam, tenellamque. Urticæ radicibus " deraſo cortice virente utuntur chymici ad purificandam aquam vitæ, im- " ponuntque eas in cucurbitam cum ſecundò diſtillant." *J. B.* iii. 447. " Ra-

" dices

" dices Urticæ majoris, ſi coquantur copioſius, rei immiſſæ luteum colorem " conciliant, quas & vulgus in ovis colore imbuendis adhibet; veluti eadem " purpureo tingit colore per radices ſalicis rotundifoliæ." *Hoffm. in Schrod. Mang.* p. 504. " Novimus juveni cuidam ab adultera & laſciva meretrice, " ſemen Urticæ propinatum, quo tardior aliàs ad actum Venereum excitaretur. " Unde *Juvenalis* irritamentum *Veneris languentis*, & acres Urticæ." *J. B.* l. c. " Semen-Urticæ. . . Venerem exſtimulare, inter medicos convenit; unde a " meretricibus amaſiis ſuis propinari ſolet." *R. H.* 161. I doubt of its having any ſuch effect. See the ſtructure of the ſpinulæ in *Hooke's Micrographia*, p. 142. However others aſſert, that they are not perforate at the extremity, that they contain no liquid, and that no juice in the nettles is acrid. vid. *Chriſt. Langius de Morbillis* as quoted by *Boecl. in Herm. Cyn.* p. 317. *Vel fac experimentum, cum vacat.*

Of Gums, Rosins, resinous Gums, and concreted Juices.

I. Of GUMS.

LECTURE LXXI.

GUMMI.

SECT. I.

GUMMI, Gummi Arabicum. *offic.* Gummi Arabicum. *B. P.* 498. *R. H.* 977. Gummi Arabicum ſive Acaciæ. *J. B.* i. 2, 431. Gummi, G. Arabicum, Gummi Babylonicum, Gummi Saracenicum, G. Acanthinum. *Schrod.* 710. Gum Arabic.—This is a white (pale, or reddiſh) tranſparent gum, without taſte or ſmell, which eaſily diſſolves in water. It iſſues from the Acacia vera. *J. B.* i. 2, 429. *T.* 605. *R. H.* 976. Acacia foliis Scorpioïdis leguminoſæ, *B.* 392. Acacia. *Dod.* 752. Acacia Ægyptica. *Lugd.* 160. Acacia Dioſcoridis. *Ger.* 1330. Acacia vera ſive ſpina Ægyptica. *Park.* 1547. Spina Acaciæ. *Lob.* 536. Mimoſa ſpinis geminatis, diſtinctis; foliis duplicato-pinnatis, partialibus utrinque duobus. *H. Cliff.* 208. Acanthus Theophraſti. *R. H.* 976. The Egyptian Thorn, or true Acacia.

It grows in Egypt, Arabia, &c. Matthiolus and others think we have not the Gummi Acaciæ; but Alpinus *(de Pl. Æg.* p. 12.) and Bellonius, better judges, aſſure us, that all the gum which comes from Ægypt is from that ſhrub, there being no other gummoſæ arbores in that country (Are there not peaches there?) And the prickles, ſiliquæ, ſemina, &c. found amongſt it confirm their opinion. " From Sayde and Alexandria were annually imported of gum to Marſeilles from 5 to 600 quintals." *Savary's Dict.* iii. 503.

" Præfertur gummi vermiculatum, vitrum referens, pellucidum, ligni ex- " pers: proximum eſt candidum: reſinoſum vero, ac ſordidum, inutile." *Dioſcor.* l. 1. c. 133. p. 68. " Uno verbo, dico me vidiſſe gummas Acatia- " rum,

" rum, figura atque colore, pleraſque ceraſorum, prunorumve gummas haud " diſſimiles." *Alp.* l. c. How are they then to be diſtinguiſhed? " Adulte- " ratur admixtione gum. ceraſorum, &c. quod cognoſcitur ſolutione in aqua, " qua ſincerum liquidiſſime & limpidiſſime ſolvitur, adulteratum non item." *Schrod.* 710. As for the figure it is accidental, and various, as well as the colour. vid. *J. B.* whoſe deſcription Geoffroy copies without naming him. From this tree we have alſo the true Acacia, *i. e.*

Acacia, Acacia vera, Succus Acaciæ. *offic.* Succus Acaciæ. *B. P.* 496.— which is a ſolid, blackiſh inſpiſſated juice, ſomewhat reddiſh within, of an aſtringent taſte. It is expreſſed from the unripe fruit or pods, well beaten in a mortar, and evaporated by a gentle heat to a proper conſiſtence; then poured on a clean cloth; and, when pretty cold, put up in bladders, in which it comes to Europe. What is made of the leaves is not ſo good. vid. *Alpin. Pl. Æg.* p. 9. & *Veſling in Alp.* p. 6.

" Acacia, ἀκακια Dioſcoridi, l. 1. c. 133. & Græcis ab ἀκαζω, acuo; unde " Acacia quaſi acuta: quam Theophraſti, l. 4. hiſt. 3. ἀκανθαν, *i. e.* ſpinam, " ſive ἀκανθαν ἀιγυπτιαν 9. hiſt. 1. eſſe volunt." *B. P.* 391.

SECT. II.

The gum is antacrid, lubricates and incraſſates; called pectoral; and commended in coughs, hoarſeneſs, heat of urine, and all diſeaſes from acrimony, or irritation, *interne & externe.*

The juice is aſtringent, and commended in fluxes and hæmorrhages, and wherever ſtyptic medicines are proper, internally or externally.

" Gum Arabicum calfacit & humectat 1. inſpiſſat, poros cutis obſtruit, " acrimoniam medicamentorum obtundit, aſperitati aſperæ arteriæ ac tuſſi " confert, ocularibus medicamentis & arteriacis commodiſſime adhibetur: & " contra dyſenteriam. *Præp.* 1. Pulvis: N. ut bene pulveretur calfiant mor- " tarium ac pila. 2. Depuratum ſolvitur in aqua, colatur ac inſpiſſatur." *Schrod.* 710.

1. It is a pure gum, free from all acrimony. " Medicamentorumque, ſays " Dioſcorides, acrium quibus admiſcetur vires hebetans," diſſolving intirely in water; crackling and ſplitting in the fire; and then flaming briſkly. — 2. " Analyſi chymica gum. Arabici electi ℔ij. exhibuerunt phlegmatis inodori, " ſaporis expertis, & limpidi ℥iij. ʒv; acidi & rufeſcentis ℥x. ʒiij. gr. liv; li- " quoris alcali ℥j. ʒviß. (*i. e.* humorum ℥xv. ʒvj. gr. xviii.) olei ℥j. ʒv. " gr. xxiv. carbonis ℥vij. ʒvj; unde cinerum ℥j. ʒß, ac inde ſalis fixi alcali " ʒiiiß." according to *Geoff.* ii. 575. He omits the jactura, which muſt have been ℥vj. ʒvj. gr. xxx: & terræ ʒv. Here is a large proportion of oil and fixed ſalt. " Gum. Arabicum igne in carbonem convertitur, non flammam " concipit. (vid. *Lewis's Pharm.* p. 9. where he implicitly copies this error, " without naming the author). Unde liquet compoſitum eſſe ex ſale ſalſo, " cum oleo craſſo, & terræ portione non mediocri conjuncto." *Geoff.* ibid. But it does flame in the fire. I threw into a red hot crucible gum. Arabici grum. ʒij. gr. ij: it ſoon began to flame, and continued flaming for above twenty-four minutes. — 3. It is commended for the hæmoptoe, phthiſis, mictus cruentus, vomitings, fluxes, ſore eyes, &c. wherever acrimony offends.

And

And the ſame may be ſaid of gummi prunorum, ceraſorum, perſicorum, and the like.

" Acacia vera refrigerat, ſiccat, craſſarum partium eſt, incraſſat, aſtringit. " N. 1. Succus hic cum rarus ſit, ſubſtituitur ut plurimum Acacia Germanica. " N. 2. Dat & aliam Acaciæ ſpeciem arbuſcula quæ gummi Arabicum profert, " ſed minus uſitatam." *Schrod.* 524.

It is of a rough and ſomewhat acidulous taſte: and ſtrongly aſtringent, as appears by every experiment made with it. It is uſed in Egypt in dreſſing and dying leather, (vid. *J. B.*) as well as in medicine. " Conſtat ex medio- " cri ſalis acidi portione, paululum ſalis alcali, terra aſtringente copioſa & " oleo tum tenui, tum ſpiſſo plurimo: ex quibus conjunctis compoſitum ex- " urgit ſalſum, aluminoſum, mucaginoſum." *Geoff.* ii. 716. Who made the analyſis? Mr. G. dreamed it. What does it explain? Nothing at all: Nothing here needs explication. How does it act then? Like an aſtringent. *Nugæ!* What a vaſt difference is there between the Acacia and gum Arabic, though produced by the ſame tree?

SECT. III.

Either may be given to ʒj. or ʒij. The gum is an ingredient in the emulſio Arabica, pulvis diatragacanthi, diaſcordium, mithridatium, theriaca, & trochiſci cardialgici: and the ſuccus is uſed in the theriaca & mithridate.

TRAGACANTHA.

SECT. I.

Tragacantha, gummi Tragacanthum. *offic.* Gummi Tragacanthum. *B. P.* 498. Gummi Tragacanthæ *Bellon.* Tragacantha gummi. *J. B.* i. 2, 408. Gum Tragacanth or gum Dragon.—This is a hard, rough, ſemipellucid, aqueous gum, or concreted mucilage, commonly in pieces twiſted and curled up like worms, of different ſhapes, ſizes, and colours; and of a mucilaginous inſipid taſte, and no ſmell; which iſſues from the root and trunk (*rather* branches) of the

Tragacantha Maſſilienſis. *J. B.* i. 2, 407. *T.* 417. *R. H.* 933. Tragacantha. *B. P.* 388. Tragacantha ſive hirci ſpina. *Dod.* 751. Tragacantha ſive ſpina hirci. *Ger.* 1328. Tragacantha vera. *Park.* 995. Tragacantha Maſſilienſis foliis incanis, perſeverantibus, ſeu non deciduis, flore albo. *H. Ox.* ii. 113. Tragacantha. *H. Cliff.* 361. Goat's-Thorn.

It grows in South France, Italy, Sicily, &c. But the gum is brought from Turky. " Imported at Marſeilles annually from Aleppo, Smyrna, Sa- " tahe, of gomme Dragan from 50 to 60 quintals; valued from 18 to 20 ſols " per pound." *Savary's Dict.* iii. 503. Is its figure natural? So ſays *Mr. T.* vid. *Voy.* 1. p. 22. " Quale ad nos adfertur, eſt glutinoſum caudidum, aut " flavum, aut ex ruffo palleſcens, contortum in erucarum, vermiculorumve " formam, tanquam violentiore preſſu per denſius colum tranſmiſſum; ſapore

" ſubdulci, & fere fatuo, aquam, cui infunditur, in lentam ſequacemque " mucaginem convertens." *J. B.* vid. *Savary's Dict.* i. 25.

" Tragacanthæ radix lata eſt & lignoſa, ac ſupra terram etiam eminet: a " qua ſurculi humiles, robuſti, latiſſime fuſi; & in ipſis foliola numeroſa, te- " nuia, inter quæ aculei ſeſe proferunt, quos ipſa occulunt, candidi, firmi " rectique. Eſt & Tragacantha lachryma quæ ſuper reſecta radice concreſcit: " quo in genere præſtat pellucens, lævis, gracilis, ſincera ac ſubdulcis." *Dioſc.* l. 3. c. 23. p. 180.

SECT. II.

It is as ſoft and antacrid as gum Arabic, but much more mucilaginous, therefore more incraſſating, and more efficacious in diſeaſes from the thinneſs or acrimony of the liquids, or irritation of the ſolids.

" Refrigerat 2. (*aliis* temperata eſt) humectat 1. (*aliis* ſiccat) lenit, cutis " ſpiracula obſtruit, acrimoniam mitigat, incraſſat. *Uſus præcip.* ad tuſſim in- " veteratam, ad fauces exaſperatas, retuſas voces, cæteraſque deſtillationes " (cum melle inde fit linctus, ſubditurve lingua ut liqueſcat) contra renum " dolorem & veſicæ roſiones (in paſſo vel brodio), in dyſenteria. Extrinſecus " ad dyſenteriam (in clyſteribus) ad rubedinem & acres deſtillationes oculo- " rum (ſoluta aqua roſarum vel lacte) ad palpebrarum ſcabritiem. Doſis ʒj. *Præp.* Species diatragacanth. calidæ & frigidæ." *Schrod.* 750.

Gummi Arabici ʒj. will entirely diſſolve in aquæ ℥j. or ij. without making it viſibly ropy, or thickiſh: but Tragacanthæ ʒj. (notante *D. Quincy*, Pharm. p. 219.) will give aquæ ℔j. the conſiſtence of a ſyrup. " A dram will give " a pint of water the conſiſtence of a ſyrup, which a whole ounce of gum " Arabic is ſcarce able to do." *N. Diſp.* p. 136. " Macerated in a ſmall " quantity of water, it forms a thick mucilaginous juice, which does not per- " fectly diſſolve in a larger." *Lewis's Pharm.* p. 68. e *Geoff.* ii. 580. *An recte?* — 2. " Analyſi chymica ex Tragacanthi ℔ij. prodierunt phlegmatis lim- " pidi, inodori, inſipidi ℥iij. ʒvij: humoris rufeſcentis, odore empyreumatico, " ſapore ſubacido, ſubamaro, quaſi nucleorum perſicorum, ℥x. gr. xlviij: hu- " moris leviter rufeſcentis, tum acidi, tum alcali urinoſi, ℥j. ʒij. gr. lx. (*i. e.* " humorum ℥xv. ʒiiß:) olei ℥j. ʒij. gr. lvi. Carbo pendebat ℥viij: unde ci- " nerum ℥j; ac inde ſalis fixi ʒij. gr. xxx. (ergo terræ ʒv. gr. xlij.) Jactura fuit ℥vij. ʒij. gr. lii." *Geoff.* ii. 579. Hence it yields ʒiv. gr. liv. leſs humorum; ʒij. gr. xl. leſs olei; ʒj. gr. vj. leſs ſalis fixi; ʒij. more carbonis; and gr. xlij. leſs terræ than gum Arabic does.

SECT. III.

It may be given to ʒj. which is enough at a time: the pulvis Diatragacanthi to ʒii. It is much uſed in troches, and is in troch. albi *rhaſis*, bechici albi & nigri, diaſulphuris, & de terra Japonica.

The doſis gummi Arabici is a ℈j. ad ʒij, & gummi Tragacanthi a ℈ß. ad ʒij. according to *Mr. Geoffroy*. None of theſe aqueous gums diſſolve either in ſpirits or in oils.

II. ROSINS.

BALSAMUM.

SECT. I.

Balſamum, Balſamum Gileadenſe, Opobalſamum. *offic.* Balſamum Judaicum Gileadenſe, è Mecha, verum, Opobalſamum, Oleum Balſami, Balſamelæon. *offic. Dale* 282. Opobalſamum, Balſamelæon, Balſamum Judaicum, Gileadenſe, Syriacum, e Mecca, Conſtantinopolitanum, album. *offic. Geoff.* ii. 473. Balm of Gilead.—This is a liquid roſin, of a yellowiſh, or greeniſh-yellow colour, of a warm bitteriſh aromatic taſte; acidulous and fragrant ſmell, reſembling ſomewhat turpentine and citrons; brought from Turky. The ſhrub which yields it is the

Balſamum Syriacum, Rutæ folio. *B. P.* 400. Balſamum, Balaſſan ab Ægyptiis vocatum. *Alp. Pl. Æg.* p. 48. B. Lentiſci folio, Ægyptiacum. *Belon. Obſ.* l. 2. c. 39. p. 110. Balſ. verum (Xylobalſamum, Carpobalſamum, Opobalſamum.) *J. B.* i. 298.–306. B. verum. *J. B. R. H.* 1755. Balſamum Alpini, *Ger.* 1528. Balſamum genuinum antiquorum. *Park.* 1528. Balſamum. *Veſling. in Alp.* p. 17. The true (natural) Balſam tree. It grows wild in Arabia, and there only, as Alpinus and Bellonius inform us; whence it came always to Judæa and Egypt, when cultivated in either of theſe countries. "Joſephus etiam, Balſami plantam (inquit) cujus hodie ferax noſtra regio eſt, "reginam Sabæ in Judæam attuliſſe aiunt. Quo cum Strabone conſentit." vid. *R. H.* 1756. "Revera naturalis ejus locus & fuit & eſt hodie Arabia, "non felix illa ad quam minus facile procurrimus, ſed Pætrea, a Petra urbe "ita dicta. Hinc in Paleſtina tranſlata, longo ante Solomonis imperium tem-"pore: duravit ibi uſque ad Cleopatram, quæ conſenſu Herodis magni, in "Ægyptum tranſtulit. Ibi ut hodie vivit, ita quoties hortulanorum incuria "perit, reſtauratur ex dicta Arabia per Baſſas Cairinos, beneficio illorum, "qui ſingulis annis ad Sepulchrum Machometis peregrinantur." *Hoffm.* 119.

"Eſt bonus ſuccus, qui recens eſt, validi odoris, ſincerus, non ſubacidus, "dilui facilis, levis, aſtringens, & linguam modice mordens. Sed varie vi-"tiatur. . . Maleficium vero facile deprehenditur. Siquidem ſincerus laneæ "veſti inſtillatus, ſi deinde eluatur, neque maculam facit, neque notam ullam "relinquit: at vitiatus inhæreſcit. Rurſumque purus lacti inſtillatus, id ipſum "coagulat, id quod adulteratus non facit. Quin & ſincerus lacti aut aquæ "infuſus, celeriter diffunditur, atque lacteſcit: at adulteratus olei modo in-"natat, in orbem circumagens, aut diffundens ſeſe, ſtellæ in modum. At-"tamen ſincerus etiam vetuſtate craſſeſcens, ſeipſo deterior evadit." *Dioſcor.* l. 1. c. 18. p. 17. All theſe marks, as explained by *Joan. Veſlingius*, in his *opobalſami veteribus cogniti vindiciæ, Patavii* 1644. in 4to. ſufficiently agree with thoſe of the modern genuine Balſamum. He had frequent occaſions particularly to examine this balſam, as it was ſent every year from the Seriffus Arabum, in compliment to the viceroy of Egypt. "Reſina erat (ſays he, p. 9.) "liquida flaveſcens, pellucida, odore ſupra terebinthinam, eximiaque ſuavi-"tate grata."———But of all the marks of its goodneſs or ſincerity, none

ſeems

ſeems ſo much to be depended on as its celeris ſuper aquam diffuſio: for, if genuine and not too old, a ſingle drop of it let-fall on water, *e. g.* in a tea ſaucer celeri motu, immediately ſpreads, as it were diſſolves and diſappears; but, in half an hour or ſo, it becomes a tranſparent pellicle, covering the whole ſurface, and may be taken up intire with a pin, having loſt both its fluidity and colour, and become white and ſoft, and cohering, and communicates its ſmell and taſte to the water. This teſt all the balſam I ſaw in Holland bore; though it is rare to get any from London that anſwers it. The eſſential oil of Juniper ſpreads indeed on water, but never coheres into a pellicle. Whether art can imitate this quality I know not. "Inventi ſunt a curioſis "hominibus liquores, qui aquis infuſi, lacteum candorem æmulari cernebant-"ur." *Veſling.* p. 21. But when he inquired of *Muſtaphæ proregis Ægypti vicarius*, whether the opobalſamum, that came that year from Arabia, was altogether genuine and pure? he made the experiment before him (*vid.* p. 9.) which he afterwards more fully deſcribes thus: "Itaque ſi cominus aquæ, aut lacti "balſami gutta admoveatur, non mergitur; ſed ſimul atque utrumvis con-"tingit, in ſummo ſeſe æquore diffundit ac dilatat. Ex alto ſi deſtilletur ea-"dem, pondere ſuo abrepta, mergitur quidem; ſed mox ſuperficiem repetit, "atque in eam ſe expandit, celeri motu, & tam expedito, ut nullus alius reſi-"noſus liquor. Nam momento quaſi temporis diffunditur. Accedit huic ce-"leri ſolutioni amplior dilatatio, cum vel unica gutta cyatho ſatis capaci aquam "receptam tenui pellicula totam obvelet. . . Diſſolutionem hanc excipit ejus "condenſatio. Nam ſimulatque in membranulam ſuccus extenſus eſt, non "aureus amplius, non flavus, ſed manifeſto pallore decolor conſpicitur. Tunc "vero ſtyli cuſpide recollecta gutta (nam colligi diſſoluta integre poteſt) etiam "evidentiore candore, lacteum ſuccum exprimit." *Veſling.* p. 30, 31. But whether the ſhops have any of the genuine pure balſam is doubted by ſome; though it is certain that a conſiderable quantity of a balſam is frequently brought from Mecca.

"Tantæ æſtimationis eſt ut princeps Arabiæ felicis, cui etiam Mecha paret, "ſingulis annis, inter alia munera, tres, quatuorve ejus libras Turcarum im-"peratori, honorarii loco tranſmittat. Cayri itidem præfecto unam. Quin "& ducibus peregrinis idem, ceu maximum honorarium præſentat." *Schrod.* p. 711. ex *Alpini de Pl. Ægypt.* p. 53. "Eſt hic valde rarum & carum." *Nucl. Belg. p.* 39. "Hodie, ex Aug. Lippi epiſtolis, tres ſunt illius ſucci ſpe-"cies. 1. Verum opobalſamum dici poteſt, & eſt pretioſus ille humor, vel "ſponte, vel ex vulneribus cortici inflictis dimanans: ſed adeo exiguum eſt "quod colligitur, ut pro indigenis & magnatibus vix ſufficiat, rariſſimeque "foras deferatur. Altera 2. ſpecies eſt balſamum è Mecca ſeu Conſtantino-"politanum, pretioſum quidem, quodque raro ad nos pervenit, niſi per mag-"nates quibus dono datur. Sic extrahitur. Arboris balſamiferæ ramuſculis "& foliis cacabum adimplent, illiſque aquam affundunt, donec ſupernatet. "Cum ebullire incipit, oleum limpidum ac tenue aquæ innatat, quod ſedulo "colligitur & ad mulierum uſum reſervatur: eo enim ad faciem expoliendam "utuntur, capilloſque inungendos. Perſeverante autem ebullitione 3. A-"liud oleum paulo craſſius & minus odoratum ad aquæ ſuperficiem elevatur, "quod ut minus pretioſum per caravannos Caïrum & ad exteras nationes "tranſmittitur, illudque eſt in Europa vulgatius." *Geoff.* ii. 476. That the

balſam got by coction may be mixed with the true tear is not improbable, ſince Veſlingius informs us that a conſiderable quantity of a coarſer balſam is thus (*viz.* by coction) obtained; and that the ſhrub requires to be pruned annually, as well as vines: but ſince the balſam, only dropt on water, ſoon loſes both its fluidity and colour, I do not ſee how it could retain either, if extracted by coction; far leſs how it ſhould ſpread on water, as I have often ſeen it do: ſome of which I bought in Holland at the rate of thirty ſtivers an ounce, as I remember.

" Anno 1640, cum in ſat magna copia Romam allatus eſſet ſuccus, phar-
" macopœi quidam, conſilio medicorum in urbe præcipuorum, theriacæ in-
" diderunt. Reclamantibus cæteris adeo, ut ad ſummum pontificem res de-
" volveretur tandem utriuſque partis conſenſu, electus fuit tanquam judex
" honorarius Petrus Caſtellus, medicus Meſſanenſis, qui edito ſcripto publico,
" pro affirmantibus pronuntiavit. Fecit idem paulo poſt Fanciſcus Perla.
" Ad me quoque cum aliquid hujus balſami miſiſſet Cl. Joh. Rhodius, quod
" aliquid mihi tribueret in hac medicinæ parte: putavi mei officii eſſe, in poſt-
" curis meis, conjungere me cum aientibus." *Hoffman*, p. 119.

" Video ſtudioſos linguarum orientalium conſentire in eo, eſſe ab Hebraico
" Baal, ſive Bel, qui eſt Belus Aſſyriorum rex, qui deificatus ab iſtis Jupiter
" eſt appellatus. Hinc Bel-ſemen, dominus remediorum." *Hoffman* 119.

" Pura puta vox Hebraica eſſe videtur Βαλσαμον. *Bal* enim ſeu *Baal* domi-
" num ſignificat, *Samen* pinguedo, oleum, unguentum, quaſi unguentorum
" princeps ſeu dominus." *R. H.* 1755. Many treatiſes have been publiſhed on this ſubſtance, as by Fallopius, Lobelius, Alpinus, Stephanus de Caſparis, Caſtellus, Perla, Veſlingius, Volkamerus, &c.

SECT. II.

It is attenuant, antiſeptic, diuretic, laxative, and vulnerary; called alexipharmic: and is commended inwardly in the aſthma, cough, conſumption, internal ulcers, putrid ſcurvies, gonorrhœas, barrenneſs, &c. and outwardly for pains, wounds, ulcers, foulneſs of the ſkin, &c.

" Inter olea quævis & balſama omnium eſt laudatiſſimum, præſtantiſſimum
" & toto orbe maxime celebratum, utpote quod vires habeat abigendis morbis
" tam internis quam externis nulli medicamento ſecundas. Confert febricitan-
" tibus, aſthmaticis; jecoris obſtructiones ſolvit, menſes movet, ſtomachi do-
lores ſedat, phthiſicos juvat, appetitum excitat. *Vide* prolixius B. de Tolu,
" & Cluſium in Monard: ut & Bellonium, ac Alpinum." *Schrod.* p. 711.

1. It is remarkably aromatic, bitteriſh, acidulous, and more agreeable to the ſmell than to the taſte, though it is not acrid. " Odoris eſt eximii im-
" primis atque acutiſſimi, terebinthum redolentis cum ſuaviore fragrantia;
" ſaporiſque amari, acris, & adſtringentis." *R. H.* 1756. " Saporis acris,
" aromatici, odoris fragrantis." *Herm. Cynoſ.* p. 673. *Dale* 282. " Odoris
" aromatici inſtar citri; ſaporis amaricantis, ſubacris, & aromatici." *Nucl. Belg.* p. 39. " Odoris fragrantis, ad citri odorem accedentis, ſaporis acris, & aro-
" matici." *Geoff.* ii. 474. It ſeems to conſiſt of an aromatic ſpirit, benign
" ſulphur, and eſſential ſalt. " Opobalſamum recens collectum & diſtillatum

" oleum

" oleum præbet tenue & fragrantiſſimum; & reſina quædam rufeſcens remanet, " quæ ſi igne urgeatur, olei craſſioris, ad terebinthinæ oleum accedentis, por- " tionem fundit, ac tandem oleum rufum, cum acidi liquoris guttis aliquot. " Ab hoc oleo tenui & volatili ejus vis pendet." *Geoff.* ii. 477; who diſtilled it recens collectum. However, the diſtillation of turpentine gives ſufficient ground to believe the balſam would yield ſuch principles; but probably much more than ſome drops of an acid liquor: and though the virtues peculiar to it do much depend on its proper ſpirit, which riſes in the moſt volatile oil; yet by no means the virtues common to it with other balſams: its ſpecific virtues even depend on this ſpirit only as it is mixed with the other principles in the natural ſtate of the balſam. — 2. Fixed or volatile alcalies diſſolve it, and render it ſaponaceous and detergent, as it blunts or deſtroys their acrimony: yea ſome ſoft animal ſubſtances, as yolks of eggs, have almoſt the ſame effect, and make it mix with water: ſpirits alſo diſſolve it. Hence on a triple account it is antiſeptic, as ſulphureous, aromatic, and aceſcent: and—3. In fact it is found by experience to prevent putrefaction. It is commonly known that the ancient Egyptians embalmed their dead, ſo as to preſerve them from corruption ſome thouſand years, by aromatics and balſams; whence the name Balſamatio. It was probably the fœtor of the carcaſes that firſt gave riſe to the uſe of theſe ſubſtances; and their effects on the dead ſoon recommended their application to the living. Jacob was embalmed in Egypt more than 3400 years ago: how long it was a practice before cannot be determined. Balſams therefore are probably among the moſt ancient remedies; and the name ſounds ſofter and more agreeably, even in the ears of the moſt delicate, than that of any other claſs of medicines to this day; and will continue ſo to do, as long as we retain a right notion of Balſam and Balſamic. Read *Fr. Hoffm. Diſſert. Phyſico-Medicam. de Medicamentis Balſamicis. L. Bat.* 1716. 8vo. For a Balſam properly is a native liquid roſin, of a fragrant comforting ſmell, very friendly to nature and wholeſome; but an enemy to corruption. But what idea can one have of a Balſamic, when Mercurialis, Lamium, Fœnumgræcum, Eruca, Chelidonium, Auriculæ Indæ, Allium, Viſcus, Sambucus, Oxylapathum, and a hundred ſuch like, get that name? vid. *Quincy's Pharm.* 62. &c. —4. This Balſam, outwardly applied, is anodyne, diſcutient, maturating, detergent, and healing: hence of great uſe in ſoreneſs, excoriation, or ulceration of the primæ viæ: " In ſpecie laudatur in viſcerum debilitate." *Herm. Cyn.* p. 673. Beſides, inwardly taken, it not only opens the belly, but is remarkably diuretic, communicating its ſmell and taſte and virtues to the urine itſelf; whereby that ſalt, acrid, putrid liquor is converted into a vulnerary liquid. Now ſince this and ſuch like Balſams prevent putrefaction, correct ſaline, bilious, rancid, and purulent acrimony; increaſe the fluid ſecretions, and are of a ſulphureous and healing nature, they muſt not only contribute to the flexility of the nervous fibres, but alſo augment their toughneſs and coheſion of their conſtituent parts, as well as hinder the degenerating of the fluids; that is, invigorate the tone of the fibres, vaſa, and viſcera. Hence Balſamics may be of uſe, both for too rigid and too lax fibres, and conſequently in many diſeaſes. " Dicimus Balſamica eſſe vere univerſalia ſeu polychreſta medicamenta, quo- " rum tanta vis eſt, quanta in ullo alio auxiliorum genere animadvertitur, " quoniam omnibus fere naturis quadrant. . . Neque minus vincendis morbis

" fere omnibus aptiſſima ſunt præſidia. Naturæ enim humanæ ſunt admodum " amica, cum ea quaſi conſpirant, atque affinitatem habent. . . Quod in nobis " vitam præſtat, quod cordi, arteriis, & nervis, robur, pulſum ac tonum af- " fert, principium (ſive ſpiritum, ſive animam, aut naturam, aut aliud quid " appellare velimus) mirifice erigunt, excitant, conſervant, conſtituunt." *Fred. Hoffman*, l. c. " In phthiſica diatheſi ſæpe conducit, fibrillarum pul- " monarium tonum reſtituendo, & ſeri in pulmones exudantis acrimoniam " temperando, viſcidoſque humores incidendo: quare aſthmaticis quoque con- " venit." *Geoff.* ii. 478.

The Balſamum is almoſt a panacea in Egypt, and commonly uſed for all ſorts of wounds, ulcers, venomous bites, poiſons, plague, putrid fevers, convulſions, vertigo, epilepſy, palſy, cough, aſthma, cold ſtomachs, obſtructions, fluor albus, ſterility, flatulent and nephritic pains, ſtone, &c. " Oculis vi- " ſum deperditum, atque auribus auditum, inſtillatum reſtituit." For which purpoſes it is alſo commended by the ancients. See Dioſcorides. N. B. In Egypt they have even a way of embalming women alive. Vid. *Alpin. Pl. Ægypt.* p. 56—59.

SECT. III.

It may be given to ʒj; but ℈j. is enough at a time. It ſhould be an ingredient in the Mithridatium and Theriaca; but the Balſamum Peruvianum is uſed as its ſuccedaneum here; and oleum nucis moſchatæ expreſſum at London.

Sydenham gave gut. xxv. in the gonorrhœa. The doſe in Lemery is gut. iv; in Albin. MS. ℈j; in Geoff. a gut. vi. ad ʒß; in Egypt to ʒj. It may be dropt on ſugar; taken in a ſoft egg; or diſſolved in the yolk of an egg, and mixed with any liquid,

As for the Carpobalſamum and Xylobalſamum; as their virtues depend on the balſam they contain, if genuine and freſh, ſo when they are old they are little worth: but being never uſed here, they are never brought home. What I ſhew I had from Holland, but cannot ſay they are genuine. In the Trochiſci Hedychroi, the Agallochum is taken for the Xylobalſamum; and the Cubebæ for the Carpobalſamum in the Mithridatium and Theriaca of our Diſpenſatory.

LECTURE LXXII.

BALSAMUM COPAIBÆ.

SECT. I.

BAlſamum Copaiba, Copaiva, vel Capivi. *offic.* Balſamum Copaiva. *Ph. Lond.* p. 5. Copaiba. *Piſ.* 56. *Marcgr.* 130. Balſamum certarum quarundam plantarum quas Copaibas vocant. *J. B.* i. 306. Arbor Balſamifera Braſilienſis, fructu monoſpermo. *R. H.* 1759. Capivus. *offic.* The White American Balſam-tree. *Dale* 337. Balſamum Braſſilienſe, Balſamum Oleum-

ve

ve Copaïba, Copaïva, vel Copaii. *offic. Geoff.* ii. 485. Balſam Capivi.—This is a clear yellowiſh-white liquid roſin, of the conſiſtence of ſweet oil when recent, for in time it turns as thick as Venice Turpentine: it is of a bitter nauſeous taſte, ſomewhat aromatic, and fragrant ſmell. *vid.* N. B. *infra.*

It flows in great plenty from a large Braſilian tree (arbor Balſamifera Braſilienſis fructu monoſpermo. *R. H.* 1759.) wounded or bored to the pith. "Pinguis & odoriferus ille liquor, quo vaſta hæc arbor abundat, ab inciſo "cortice ad medullam uſque luna plena, tanta quantitate diſtillat; ut ſpatio "trium horarum ad ℔xij. effundat." *Piſo* 56. *Marcgrave* ſays much the ſame, p. 131. "Circa arboris caudicem terebrâ ad medullam uſque perfodi-"tur; and thus it gives "Oleum ſeu Balſamum limpidiſſimum, inſtar olei "Terebinthinæ deſtillati conſiſtentia & ſapore, odoris reſinoſi, &c." There is ſome account of this tree in *Joan. Baptiſta Labat's Voyage aux Iſles de l'Amerique (Paris*, 1722. in 12mo. vol. 7.) *vol.* 2. *cap.* 17. which I have not ſeen.

"Balſamum Copaiba probatur hoc modo. Gutta ejus acu deprompta im-"mittitur aquæ frigidæ, & ſi illa fundum petit non diſſoluta, vel in medio "aquæ hærens retinet figuram ſuam, genuinum bonumque eſt balſamum: "contra vero ſi illa gutta ſe extendit, ſolvitur, vel manet in ſuperficie aquæ, "notatur adulteratum. N. B. Eſt conſiſtentiæ Terebinthinæ Lariceæ; ſi li-"quidius admixtum habet aliquod oleum. Per ætatem evadit ſpiſſius, & "coloris magis ab albo recedentis, non vero ſiccum ac durum fit." *Rieger Introd.* ii. 63. I dropt this Balſam, as well as the Peruvian, from a little height; they ſunk to the bottom, and each remained there in form of a round drop: but if the drop has little or no fall, it ſwims upon the water.

SECT. II.

It is antiſeptic, diuretic, and purgative, agreeing in ſome things with the Balſamum; but more purgative, and not ſo ſubtile, nor ſo agreeably aromatic: and is commended and much uſed in coughs, conſumptions, internal ulcers, nephritic pains, gonorrhœas, fluor albus, &c.

"Calidum eſt in 2. craſſum, valdeque pingue & reſinoſum. Pectori ad "ſtomachum languidum, ventri ad colicos frigidos cruciatus, illitum condu-"cit: guttulæ aliquot exhibitæ per os, robur addunt viſceribus, illiſque to-"num reddunt: fluxiones muliebres, curſus ventris, & gonorrhœas quoque "ſiſtunt, &c." *Piſo*, p. 57. "Nervis apprimè amicum eſt: guttulæ iij. "vel iv. in ovo ſorbili, bis vel ter mane ſumptæ, dyſenteriam, vel alios fluxus "ventris, ſiſtunt & curant. Calidum & ſiccum eſt in 2° gradu." *Marcgr.* p. 131.

1. It is a pure balſam, of a laſting and diſagreeable bitter taſte, and aromatic ſmell, though not ſo pleaſant as the former. "Saporis acriuſculi, ama-"ricantis, aromatici; odoris fragrantis. In fluore albo & gonorrhœa eſt ſpe-"cificum." *Herm. Cyn.* 671. "Saporis acris, amari, aromatici; odoris fra-"grantis." *Dale* 337. ad ligni Calambourg dicti odorem accedentis." addit *Geoff.* ii. 485. "Odoris fortis reſinoſi, & ſaporis amaricantis, calidi, & acris." *Nucl. Belg.* 37. — 2. "Ejus ℔j. deſtillatione dat olei ætherei ℥vj. ſaporis & "odoris valde penetrantis & jucundi, coloris viridantis, formæ paulo con-

"ſiſten-

" fiſtentioris." vid. *Rieger.* l. c. and *Geoff.* ii. 487. " Diſtilled in a ſtrong " heat, without addition, it yields a blue oil." *N. Diſp.* p. 91. " Hujus ar- " boris lignum, ob elegantem colorem, ſaturatè-rubrum, a fabris lignariis " expetitur tum ad aſſeres latos conficiendos, tum etiam ad varia opera ele- " gantiora concinnanda; necnon ad tinctorios uſus, uſurpatur." *Geoff.* l. c. —3. *Dr. Fuller* obſerves, that it does not make the urine ſmell of violets; but communicates to it its bitter taſte. " Sapore donatur amaro, acri, tere- " binthinaceo, admodum penetranti & in ore durabili: atque licet videatur " eſſe quædam terebinthinæ ſpecies, urinam tamen odore violaceo minime in- " ficit, illam vero ſapore manifeſte amaro (intenſe amaro, *Geoff.*) imbuit; " ejuſque & ſeri ſanguinis, & ſativæ muriaticam ſalſedinem mirifice delet." *vid.* Miſturam balſamicam, & miſt. balſ. nephriticam, in *Fulleri pharm. extemp.* where it is commended in ſanguinis cachexiâ ſcorbuticâ, rancidâ & putredinali; for ulcers, the palſy, arthritis, obſtructions and heat of urine, " novi quendam " chylum pro lotio excernentem, hujus beneficio integre ſanitati reſtitutum;" for coughs, tubercles in the lungs, " atque licet intenſe amarum ſit, & mani- " feſte calidum, hecticis tamen optime convenire notavi, &c." Thus *Fuller*, perhaps ſomewhat hyperbolically: but certain it is that, not like many new medicines, this Balſam is more uſed, as well as commended, now, than when it came firſt to Europe. He obſerves alſo, that if ʒij. or ʒiij. be taken for a doſe, ſub forma potionis albæ, it will purge as well as turpentine. But I have obſerved this effect, when no more than ℈j. was thus taken. —4. " Om- " nes eo diu utentes appetitu proſtato laborant." *Albin. MS.* But this is no objection againſt its virtues, or uſe; only a caution as to the doſe.

SECT. III.

It may be given to ℈j. in a ſoft egg, ſugar, pills, or, ſub forma emulſionis, diſſolved in the yolk of an egg and diluted Dr. Fuller's way. It is uſed in the tinctura balſamica & cantharidum, pilulæ pacificæ & ſcilliticæ.

" Datur ad ℈j. *Herman*; ad gut. xxx. *Albin. MSS*; ad gut. xxiv." *Lemery. Fuller* gives a ſpoonful of his mixture twice a day, which contains balſ. gr. x. or xij. " Exhibetur a gut. v. ad xv. vel xx." *Geoff.* ii. 488. N. " I have " found it to yield ſometimes, upon diſtilling it with water, more than half " of its weight of a clear colourleſs eſſential oil, &c." *Lewis's Pharm.* p. 12. *N. Diſp.* l. c.

B. PERUVIANUM.

SECT. I.

Balſamum Peruvianum, Balſamum Judaicum. *offic.* Balſamum Indicum ex arbore punica malo majore, Xylo dicta, foliis urticæ. *B. P.* 401. Balſa- mum Monard. *Cluſ. Exot.* 302. Balſamum Peruvianum. *Park.* 1570. Bal- ſamum ex Peru. *J. B.* i. 295. *R. H.* 1757. Cabureiba. *Piſon.* 57. Cabui-Iba *Marcgr.* 137. Balſam of Peru.—This is a liquid roſin, of the conſiſtence of Venice Turpentine, or liquid honey, of a reddiſh-black colour; of a warm, ſub-

ſubacrid, and aromatic taſte; and fragrant ſweet ſmell, like benzoin and ſtorax.

The tree whence it is got grows in Peru and New Spain. "Ramos atque "etiam truncos arboris, aſſulatim & minutim conciſos in lebetem ampliſſi- "mum injiciunt, multa deſuper affuſa aqua: bulliunt omnia & fervent quan- "tum ſatis eſſe putant: igne ſublato frigeſcere ſinunt, & conchyliis oleum "ſupernatans colligunt. Id vero eſt quod in has regiones invehitur, & quo "vulgò utimur, colore ex nigro rubente, odoris ſuaviſſimi." *Monardes*, l. c. & *Geoff.* ii. 483. only abridges him unnamed. But it appears to be heavier than water, and ſo will fall to the bottom. The balſam which this tree yields by inciſion is white and more fluid, but rarely found in Europe, and never in the ſhops. This balſam was among the firſt of the American ſimples which came to Europe; and ſold at firſt for twenty ducats the ounce: but in Monardes's day a pound might have been got for three or four ducats. He even ſays, "Romam primum delati uncia, centum ducatis veniit: poſtea, "tantâ quantitate illatâ, vileſcere cœpit, & etiam gratis quodammodo dari, "ut ſolet in rerum abundantia ſive raritate plerumque contingere. Nam cum "magno veniret, omnes ejus virtutes admirabantur atque requirebant: poſt- "quam vero imminutum eſt pretium non æſtimatur, cum tamen idem Bal- "ſamum ſit quod fuit, cum centum ducatis uncia venderetur." *Monard. Cluſ. Exot.* p. 303.

SECT. II.

It is hotter and more agreeably aromatic than Capivi; reckoned more nervine and diaphoretic, and to be the beſt ſuccedaneum for the Balſamum Verum. It is called analeptic, pectoral, and ſtomachic; and commended for the aſthma, conſumption, palſy, colic, hyſteric paſſion, ſterility, &c. and outwardly for fixed pains, cramps, contuſions, ulcers, &c.

"Calfacit & ſiccat 2. diſcutit, emollit, ſubaſtringit. *Uſus præcip.* in aſth- "mate, phthiſi, nephritico dolore, menſibus obſtructis, ventriculi debilitate ac "dolore, epate obſtructo, utero ſqualido, atque inde ad concipiendum inepto, "ſuffocatione ex utero, &c. Extrinſecus lenit dolores ex humoribus frigidis "ortos, diſcutit humores aqueos, roborat caput ac nervoſas partes, contrac- "tioneſque ſanat, ventriculi flatus diſcutit, cruditates tollit, lienem durum "emollit, nephriticum dolorem mitigat, urinam remoratam promovet, arthri- "ticis doloribus ſumme confert: in chirurgia proficuum eſt vulneribus recen- "tibus, tum conſolidando, tum noxia diſcutiendo, inveteratiſque; necnon & "nervorum prodeſt contuſionibus febricitantibus (ſpinam ante paroxyſmum "inungendo atque cum vino guttulas aliquot exhibendo, idque iteratis vici- "bus). Doſis gr. iv. v. vj. N. Tantæ cenſetur efficaciæ, ut ſint qui Opo- "balſamo ſubſtituere non verentur. Nic. Monard. *Præp.* Spiritus ac oleum "ſtillat." *Schrod.* p. 713.

1. It is pretty hot to the taſte, ſcarcely acrid, or bitteriſh; and extremely odoriferous, a ſingle drop of it being capable of perfuming a very large quantity of any ſubſtance. Diſſolved in the yolk of an egg it is ſaid to be more acrid to the taſte than when undiſſolved. "Odor fragrantiſſimus ſtyracis, ad "benzoini ſuavitatem nonnihil accedens, & qui ſua fragrantia totum adeo

" conclave perfundat, diuque perſeverat; ſapor ſubacris, linguam mordicans. " Flammam facile concipit, ſuaviterque olentem fumum ſpargit. Aquæ in- " jectus mox fundum petit." *J. B.* " Balſamum Peruvianum album eſt ſa- " poris acriuſculi aliquantum amari; odoris fragrantis & grati: nigrum eſt " ſaporis & odoris albo debilioris & ignobilioris." *Herman. Cyn.* p. 668, 670. " Odoris fragrantis & grati, fere inſtar ſtyracis, ſaporis ſubacris & calidi. " Bonum eſt, ſi in charta non facile fluat, nec rubrum in ea appareat." *Nucl. Belg.* 38. " Saporis ſubacris & mordicans; odor fragrantiſſimus." *Dale* 337. " Balſamum Peruvianum album eſt ſaporis acriuſculi, aliquantum " amari; odoris fragrantis & ſuavis, ad ſtyracem accedentis: nigrum odoris " fragrantiſſimi, benzoinum ſuaviter referentis; ſaporis ſubacris, linguam le- " viter mordicantis." *Geoff.* ii. 482. " Cum vitello ovi ſolutum, longe acrius " fit, obſervante Etmullero, & magis fauces vellicat, quam per ſe ſumptum." *Ibid.* p. 484. It is ſaid alſo—2. to yield little (if any) æthereal oil by diſtil- lation. " Balſami Peruv. albi oleum deſtillatum ſtatim concreſcit in ſalem " inſtar ſacchari, candidum velut camphora." *Herm. Cyn.* p. 670. " The " dark-brown balſam of Peru, diſtilled with water, yields a ſmall quantity of " very fragrant oil." *Lewis's Pharm.* p. 12. " Balſ. Peruv. nigri ℔ß. cum " aqua per veſicam deſtillatum, vix ʒß. dat olei fragrantiſſimi rubri, omnis " empyreumatis expertis." *Rieger Introd.* ii. 77. It is not to be wondered at that it yields little eſſential oil, ſince it is got by coction. " It does not unite " with water, milk, expreſſed oils, animal fats, or wax: it may be mingled " in the cold with this laſt: but if the mixture be liquified by heat, the bal- " ſam ſeparates and falls to the bottom." *New Diſp.* p. 92. " Concretum, " ut inquit Etmullerus, anomalum eſt, quia neque cum aqueis, neque oleoſis, " neque volatilibus intime miſcetur; &c." *Boecl. in Herm. Cyn.* p. 669.—3. It is much commended as vulnerary, interne, externe; and wherever the Opobalſamum is proper. Among other things, " Juventam conſervat; (ſays " Monardes, and adds) magnæ exiſtimationis vir mihi probæ notus, ab ejus " uſu nullos dolores ſenſit, & tametſi ſenex, tam validus eſt ut juvenis videa- " tur."

SECT. III.

It may be given to ℈j. It is an ingredient in the Balſamum Locatelli, tinc- tura balſamica, elixir polychreſtum, mithridatium & theriaca (loco opobal- ſami) balſamum ad apoplecticos, balſamumque traumaticum.

" In ovi vitello ſolutum datur a gr. v. ad ʒß." *Herm. Cyn.* 668. " Sumitur " ad gut. x." *Albin. MS.* " Exhibetur a gut. iv. ad xij." *Geoff.* ii. 483. Sydenham gave gut. x. thrice a day in conſumptive coughs.

B. TOLUTANUM.

SECT. I.

Balſamum Tolutanum. *offic.* Balſamum Tolutanum foliis ceratiæ ſimilibus, quod candidum eſt. *B. P.* 401. Balſamum de Tolu. *Monard. Cluſ. Exot.* 304. *Park.*

Park. 1570. *J. B.* i. 296. *R. H.* 1758. Balſam of Tolu.—This is of a ſolid but ſoftiſh conſiſtence, growing friable by age; of a yellowiſh red colour; of a ſoft aromatic reſinous taſte, and fragrant ſmell, ſomewhat like that of lemons. It is brought from Tolu in America in calabaſh ſhells.

" Nunc recens advehitur ex continentis quadam provincia, inter Carthagi-
" nem & nomen Dei ſita, Tolu ab Indis appellata, Balſami quidam liquor,
" maximarum virium, præſtantiſſimumque quod hactenus ex iis regionibus
" allatum ſit, medicamentum. . . . Colore rubro ad aureum tendente eſt, mediæ
" inter liquidum & denſum conſiſtentiæ, glutinoſus admodum, & ubicunque
" reponatur firmiter adhærens, ſapore dulci & grato, nec ſi ſumatur nauſeam
" movente, quemadmodum reliqua balſama, odore excellentiſſimo, & limo-
" num fragrantiam quodammodo referente, ſic ut ubicunque reponatur celari
" non poſſit, ſed ſuo odore locum gratiorem reddat: etiam pauxillum in vola
" manus attritum ſuaviſſimum ſpirat odorem, uti Jaſmini fere." *Monard. Cluſ. Exot* 304. He ſays it is got from a ſmall tree wounded in the bark: but gives a very lame deſcription of it.

SECT. II.

It is the mildeſt and pleaſanteſt of all the balſams, preferred to the Peruvian, yea equalled to the opobalſamum by ſome, and is much uſed in diſeaſes of the lungs, internal ulcers, old gleets, fluor albus, &c.

" Antecellere videtur B. Peruviano, efficaxque eſt ad omnia ad quæ B.
" Ægyptiacum. Calfacit & ſiccat, attenuat, reſolvit, vulnerarium eſt, pec-
" tus expurgat, &c. *Uſus præcip.* in aſthmate, phthiſi, in ventriculi crudi-
" tate & dolore. Extrinſecus in doloribus a cauſa frigida quibuſcunque, &
" imprimis capitis, arthriticis & nephriticis, in defluxionibus ad oculos cohi-
" bendis, in paralyſi, in ventriculi imbecillitate & dolore, ac inflatione (in-
" unctum cum oleo nardino), in hydrope (illitum cum unguento aperitivo),
" in lienis imbecillitate, in tumoribus quibuſcunque & œdematibus, in con-
" tractura; parotides inſuper ſeu ſcrophulas cæcas curat. In primis autem ce-
" lebratur in vulneribus conſolidandis, defendendis, præſertim ſi oſſa quoque
" ſint confracta (quippe fragmenta expellit); in vulneribus articulorum, ſec-
" tionibus nervorum, puncturis, contuſionibus, &c. Doſis gr. iij. iv. &c.
Schrod. 712.

Here is no acrimony, no nauſeous ſtimulus, but an agreeable comforting ſmell: hence it is agreeable to ſuch as can neither bear the perfume of the Peruvian balſam nor hateful taſte of the Capivi. It is indeed of a thicker conſiſtence, and more ſticking, and ſo perhaps more difficultly digeſted; but ſugar, yolk of an egg, or ſoft oil, will eaſily help that.

SECT. III.

It may be given to ʒj. and more, ſafely. If Balſami p. 1. be well rubbed with ſacchari p. vj. vel viij. into a balſamo-ſaccharum, it will mix with any ſyrup. *Our* ſyrupi balſamici ℥ij. contain only the tincture of balſam ʒj. that is

gr. v. in ʒj. The *London* syrup retains only the proper aromatic spirit; which we value least, since much of it must fly off with the spirit of wine.

Schroder's dose is gr. iij. iv. &c. Lemery gives it to gut. iv; though he gives B. Capivi to gut. xxiv. I can see no danger in ʒj. if it be rightly dissolved by sugar, or the yolk of an egg. The syrupus balsamicus of our dispensatory, edit. 1735. could not answer because balsami & sacchari ana p. æ. were taken; so that there was by far too little sugar.

LIQUIDAMBRA.

SECT. I.

Liquidambra, Ambra liquida, *offic.* Liquidambar. *B. P.* 502. *Park.* 1590. *R. H.* 1848. Liquid-ambar & ejus oleum. *Monard. Clus. Exot.* 302. Liquid-ambar, resina arboris ocosol dictæ, foliis hederæ, odore styracis liquidæ. *J. B.* i. 2, 323. Liquid-amber:—which is a liquid rosin, about the consistence of Venice turpentine, of a more reddish yellow colour, of a hot aromatic taste, and fragrant smell, somewhat like that of storax.

It is brought from the West-Indies; but rarely to be met with in the shops. "It is rarely used, not being to be had in the shops." *Miller's Bot.* p. 273. It is got from a large tree in New Spain, Virginia, &c. which is supposed to be the

Arbor Virginiana, aceris folio; potius platanus Virginiana, styracen fundens. *R. H.* 1799. *Item* styrax aceris folio. *R. H.* 1681. Acer Virginianum odoratum. *H. L.* 641. Liquidambari arbor; seu styraciflua, aceris folio, fructu tribuloide, *i. e.* pericarpio orbiculari, ex quamplurimis apicibus coagmentato, semen recondens. *Pluken Phyt.* 42. *Alm.* 224. Liquidambar. *H. Cliff.* 486. G. plant. p. 463. vulgo the Liquid-amber tree.

"Sunt qui ex arboris ramis comminutis & coctis pinguedinem innatantem "colligunt & vendunt pro legitimo oleo. Atque hic liquor a nonnullis sto- "rax liquida putatur in aromatariorum & pharmacopœorum officinis vulgo "venalis. Fran. Hernandez oleum hoc ex arbore ipsa vel sponte, vel incisa "exstillare ait." *R. H.* 1848. "Liquidambar olim magno erat in usu & in "unguentariorum officinis sæpius & magna copia reperiebatur. Nunc vero "quandoquidem odoramenta fere obsoleverunt, rariſſime in officinis occurrit, "ita ut iis sit prorsus ignotum. . . Liquidambar olim maxima copia ad pelles "& chirothecas odoribus imbuendas absumebatur. Nunc vero apud nos "odoramentum illud nomine vix cognoscitur. . . Hodie, sicut pleraque alia "odoramenta, obsolevit: ab his enim nostratum capita læduntur, gravantur, "& mulieres in hystericos affectus inducuntur." *Geoff.* ii. 490, 1, 2.

SECT. II.

It is a warm aromatic balsam, agreeing probably in virtues with the Peruvian; but used only outwardly, as anodyne, discutient, ripening, and sarcotic, for pains, obstructions, tumors, &c.

"Calfacit

" Calfacit 2. (liquidior pars 3.) humectat 1. reſolvit, obſtructiones expedit, " emollit, maturat. *Uſus præcipui* in utero obſtructo & indurato, tumoribus " duris, &c. in ſuffitibus & ſimilibus. N. adhibetur mechanice in perfuman- " dis (ut aiunt) coriis, ac chirothecis. *Præp.* 1. Oleum, vel ſeorſim collec- " tum, vel expreſſione a ſicciore parte reſinæ ſeparatum. 2. Coctione ex ra- " mis elicitum. Coquunt enim Indi ramulos in aqua, ſupernatantemque pin- " guedinem nomine olei colligunt." *Schrod.* 724.

It is hot and aromatic, and ſmells ſomewhat like balſam of Peru and ſtorax: it is ſaid alſo to be ſomniferous. " Eſt ſaporis acris aromatici; odoris ad ſty- " racem accedentis: ſtyraci reſpondet, &c." *Herm. Cyn.* 672. " Saporis acris, aromatici; odoris fragrantis." *Dale* 287. " Saporis mordacis & aromatici; " odoris grati, fere accedentis ad odorem ambræ." *Nucl. Belg.* 178. " Sapo- " ris acris, aromatici; odoris fragrantis, ad ſtyracem & ambram accedentis." *Geoff.* ii. 490. " Fr. Hernandez ſomni inducendi vim Liquidambaro & ejus " oleo tribuit." *R. H.*

TEREBINTHINÆ.

SECT. I.

1. Terebinthina Chia, Cypria vel vera. *offic.* Terebinthina vera. *B. P.* 500. The roſin of the Turpentine-tree—is clear, almoſt pellucid, liquid, but thicker and more tenacious than Venice Turpentine; of a yellowiſh colour, of an acrid, reſinous, bitter taſte; and fragrant ſmell. The tree that produces it is

Terebinthus vulgaris. *B. P.* 400. *T.* 579. Terebinthus. *Dod.* 870. *Ger.* 1433. *J. B.* i. 279. *R. H.* 1577. T. anguſtiore folio, vulgatior. *Park.* 1526. Piſtacia, foliis impari-pinnatis, foliolis ovato-lanceolatis. (mas & fœmina) *H. Cliff.* 456. The Turpentine-tree.

It grows in the ſouth of France, Spain, Italy, Cyprus, Scio, &c. flowering in April. " The beſt true Turpentine comes from the iſland of Chio: " that from Cyprus is browner and fuller of droſs." *Miller's Bot.* 433. " The " Turpentine harveſt in Scio is from about the end of July to October. The " peaſants make inciſions with a hatchet acroſs the trunks of the large trees, " whence the Turpentine runs out, and falls on flat ſtones laid under them: from which they take it up with ſticks, and let it drop into bottles." vid. *T. Voy.* Let. 9. Vol. I. p. 145. He ſays this iſland furniſhes no more than 300 oques, that is (an oque being generally 57 ounces, though ſome make it only 50) 1068lb. 12 ounces. But according to S. Carſueil there are imported to Marſeilles, of fine Turpentine of Scio, from 15 to 20 quintals annually. vid. *Savary's Dict.* iii. 507. " The Chio Turpentine is of a white colour, in- " clining to a green, clear, viſcous, and of little ſmell. It ought to be choſen " in conſiſtence ſolid, almoſt without any taſte and ſmell; and above all ſhould " ſtick little either to the fingers or teeth." *Savary's Dict.* ii. 1746. This is now but little uſed.

2. Terebinthina, Terebinthina Veneta, Reſina Laricis. *offic.* Venice Turpentine is a liquid roſin, of the conſiſtence of new honey, and very viſcous; of a yellowiſh colour, of a warm bitter reſinous taſte, and fragrant ſmell; which flows from a tree wounded or bored to the heart. This tree is the

Larix.

Larix. *B. P.* 493. *Dod.* 868. *Ger.* 1365. *Park.* 1533. *R. H.* 1405. Larix folio deciduo, conifera. *J. B.* i. 2, 265. Abies foliis fasciculatis, obtusis. *H. Cliff.* 450. The Larch tree, or Larix tree.

The Terebinthina Laricea, as also the Abugna, even in Galen's day, were sold, by some, for the true Turpentine. This Venice Turpentine also is now seldom found in the shops, and is excluded the *London M. M.* But the Terebinth. Argentoratensis is retained; though perhaps neither of them commonly kept. The Turpentine which runs from incisions made in larches, firs, or pines, in the province of Forez in France, passes at Paris for the Venice Turpentine, according to *Savary's Dict.* ii. 1746. as probably the New England Turpentine does for the Strasbourg at London. "The Venice Turpentine "was formerly of great use in the shops, being of a browner colour and "thicker than the Strasbourg, and of a more resinous smell: but what goes "now under that name is generally brought from New England. Whether "produced from the fir or pine, or spruce trees, or from them all, is uncer-"tain. The finest sort comes very near the Venice Turpentine, both in co-"lour and consistence, as the more ordinary is like what is gotten from the "pine." *Miller's Bot.* 433.

3. Terebinthina Argentoratensis, Terebinthina Abiegna seu Abietina officin. Strasbourg Turpentine.—"This is clearer, of a paler colour, and of a thin-"ner consistence than Venice Turpentine; of a bitterish taste, and of a plea-"sant smell, a little like lemon-peel." *Miller's Bot.* p. 2. "Laricеæ con-"sistentiâ similis, sed magis transparens, amaricans, valde fragrans, & sapore "citrii mali corticem proxime referens." *Dale* 277. "Substantia est resi-"nosa, liquida, dum recens est, Laricеâ pellucidior, minus lenta, minusque "tenax, odore magis grata, & amara magis, corticis mali citrei odorem & "saporem quodammodo referens: per tempus flavescit & spissescit." *Geoff.* ii. 505. He says that which is got from the tubercula Abietum novellarum is rare and dear. But Strasburgh Turpentine among the Germans is got by wounding the Pinus, Piceasque in May, p. 507. And *Hoffman*, p. 292. observes, that some prefer the Abiegna, others the Larigna, and that Matthiolus says, "Larignam colatam, & ultimam claritatem perductam, vendunt "pro Abiegna;" and that after a year it begins to turn yellow. "Te-"rebinthina Argentoratensis a multis Venetæ præfertur, nec immerito, "certe triplo pluris venit." *R. H.* 1403. Is this common in the London shops? or does New England Turpentine strained, &c. supply its place? However, the Strasbourg Turpentine ought to be the liquid rosin of the

Abies. *offic.* Abies conis sursum spectantibus, sive mas. *B. P.* 505. Abies. *Clus. H.* 34. *Ger.* 1363. *Park.* 1539. *R. Syn.* 441. Abies altera. *Dod.* 866. Abies fœmina sive ἐλατη Θηλεια. *J. B.* i. 2, 231. Abies Taxi foliis. *R. H.* 1394. Abies Taxi folio, fructu sursum spectante. *T.* 585. Abies foliis solitariis, apice emarginalis. *H. Cliff.* 449. The Yew-leaved Fir-tree, or Silver Fir.—It grows in Sweden, Germany, &c.

4. Terebinthina communis. *offic.* Common Turpentine is thicker than the Venice, opake and whitish, of the consistence of old honey; of a bitter, resinous disagreeable taste, and somewhat more strongly fragrant smell; which is or may be gotten from a variety of firs and pines, wherever they are common. But the tree which is said to yield most of it is the

Pinus

Pinus ſylveſtris, Pinaſter. *offic. Dale* 277. Pinus ſylveſtris. *B. P.* 491. *Ger.* 1356. *R. H.* 1399. *Fl. Lap.* 273. Pinus ſylveſtris, vulgaris, Genevenſis. *J. B.* i. 2, 253. *T.* 586. Pinus ſylveſtris ſive Pinaſter. *Dod.* 860. Pinus foliis geminis, primordialibus ſolitariis, glabris. *H. Cliff.* 450. The Wild or Mountain Pine.—" Terebinthinam communem Pinus montanæ *ſc.* ſylveſtris, " C. B. liquorem eſſe exiſtimo; ſiquidem a Maſſilia ad nos defertur; ipſe " autem obſervavi non procul ab ea urbe montes hoc genus arborum ſylvis " veſtitos, earumque plurimas, deciſo non longe a radice cortice, vulneratas " ut reſinam funderent, eique excipiendæ fictilia truncis appenſa aut ſubjecta." *R. H.* 1403.

5. Pix liquida. *offic.* Tar—is a liquid roſin excocted from the trees by the force of fire, or a Terebinthina ſemiambuſta, of a black colour, thick and coarſe conſiſtence, and of a bitteriſh reſinous taſte, and ſtrong ſmell. " Sed " & picem meminiſſe debemus non aliud eſſe quam combuſtæ reſinæ fluxum." *Plin.* l. 23. c. 1. p. 592.

It is brought from Sweden and Norway, and may be extracted from any reſinous tree, by a kind of diſtillation per deſcenſum. You have the proceſs briefly in *Schroder* 735; alſo in *R. H.* 1396; *Savary's Dict.* 1160. vol. ii. and many others: even in *Theophr.* l. 9. hiſt. c. 3. p. 972. See alſo *R. H.* 1402. " Pix liquida quam nonnulli κωνον appellant, e pinguiſſimis Piceæ Pinique " lignis colligitur." *Dioſcor.* l. 1. c. 94. p. 52.

Pix ſicca, pix navalis, Pix *offic.* is either the thicker ſubſiding part of tar, or the tar boiled down to a due conſiſtence; which was called anciently alſo Palimpiſſa: but the Pix navalis or Zopiſſa was a different ſubſtance. " Pix " ſicca e liquida decocta fit. A nonnullis Palimpiſſa (q. pix iterum cocta) " nominatur. . . Zωpiſſam ſunt qui nominent navibus deraſam cum cera reſi- " nam, quam nonnulli Apochyma vocant." *Dioſcor.* l. 1. c. 97, 98. p. 53. Piſſelæum. *Dioſcor.* l. 1. c. 95. p. 52.

Picea. *offic. Dale* 277. Picea major, prima; ſive Abies rubra. *B. P.* 493. Picea major. *Ger.* 1454. Picea vulgaris. *Park.* 1538. Picea Latinorum ſive ἐλατη ἀρρην, Abies mas Theophraſti. *J. B.* i. 2, 238. Abies. *Dod.* 866. A. mas Theophraſti. *R. H.* 1396. *Syn.* 441. A. tenuiore folio, fructu deorſum inflexo. *T.* 585. Abies, foliis, ſolitariis, apice acuminatis. *H. Cliff.* 449. A. foliis apice acuminatis. *Fl. Lap.* 277. The Pitch tree, *or* Common Fir.

6. Pix Burgundiaca (& Pix Græca, ſed malè) *offic.* Burgundy Pitch.—This is a ſofter kind of ſolid roſin, of a yellowiſh brown colour, of the taſte and ſmell of Common Turpentine. It ſeems to differ from this Turpentine only in having ſome part of its ætherial oil ſeparated by coction or diſtillation. vid. *Dale* 277. " Ex reſina candida liquata cum Terebinthina communi & " oleo Terebinthinæ fit Pix lenta, Burgundiaca dicta." *Geoff.* ii. 510. vid. *Savary's Dict.* ii. 205. & 1160.

7. Reſina, Reſina alba, Reſina communis. *offic.* Common White Roſin:—which is hard, friable, ſemipellucid, and of a dirty yellowiſh colour, taſting and ſmelling much like Turpentine.

" Ex Piceæ reſina præparata ſunt, 1. Reſina communis. *offic.* (White " Roſin.) coctione in lebete cum aqua, dum ad conſiſtentiam advenit. 2. Pix " liquida offic. 3. Pix, ſiccaque Pix; & 4. Pix Burgundiaca." *Dale* 277.

8. Reſina

8. Reſina nigra, Colophonia, Pix Græca. *offic.* Colophonia officinarum. *B. P.* 504. " Colophonia Hiſpanica & Græca. *Matth. Lugd.* Colophonia, " Pix arida, quibuſdam Pix Græca, Cord. hiſt." *B. P.* Colophony or black roſin—is very friable and blackiſh, but pretty tranſparent and red when looked through, of the taſte and ſmell of the former. " Ex Terebinthina communi " conficitur oleum per deſtillationem cujus reſiduum, vel caput mortuum, " Colophonia. *offic.* Colophony, or Black Roſin dicitur." *Dale* 278.

" From the common Turpentine is diſtilled the oil; the finer and more " volatile part whereof, and what comes firſt, being called the ſpirit: what is " left at the bottom of the ſtill is the commun Roſin; which if taken out " before it be drawn too high, and then waſhed in water by a peculiar method, " is what we call White or Yellow Roſin. The Black Roſin is the ſame " more evaporated, and not waſhed at all." *Miller's Bot.* p. 347. The Black Roſin however is by much the more pellucid and cleaner. *Is it melted and ſtrained?*

9. Thus vulgare. *offic.* " Thus fœmininum; Pini Reſina. *Mont. Ind.* " *Exot.* 11." *Dale* 278. Common Frankincenſe, or Par-roſin, is a ſolid, but ſoftiſh Roſin, of a browniſh yellow colour, and of the taſte and ſmell of Turpentine. " Pineam reſinam eſſe affirmat Parkinſonus, in terram defluentem, " & brevi indureſcentem; cui & nos facile aſſentimur, quia ab eodem loco " (Maſſilia) ad nos adfertur, nec aliæ ſunt in vicinia arbores reſiniferæ." *R. H.* p. 1403. " The Common Thus is reputed to be the native Roſin of the " Wild Pine, or the Reſina Pini, which is of a whitiſh-yellow colour (ochro- " leuci, *Dale*) whereof ſome pieces are fat, ſoft, and whitiſh, and others hard, " brittle, and more yellow. There is but little of this to be got pure at " preſent, being adulterated by common yellow Roſin, by ſome way that " crafty knaves have found out." *Miller's Bot.* p. 347. But as Dr. Robinſon ſuſpects (*R. H.* 1403.) the common Frankincenſe may flow from the Pitch tree, and other reſiniferous trees, as well as from the Wild Pine. For, in a word,

As different ſorts of Roſins, as to colour and conſiſtence, may be got from any of theſe reſiniferous trees; ſo of Common Turpentine, by boiling or diſtilling it in water, may be made an ætherial ſpirit, oil, Burgundy Pitch, yellow and white or black Roſin, at leaſt ſubſtances of the ſame conſiſtence; perhaps alſo Straſbourg Turpentine, (as I have been very lately informed that at London they make Venice Turpentine of Common Roſin and Turpentine Oil. What length will ſuch villany go, if the government continue to overlook it?) And by a dry heat alſo, or naked fire, Tar, Pitch, and Stone Pitch. From what ſpecies of trees therefore any of theſe ſubſtances come, which I ſhew you, if native; or how prepared, or compounded, if factitious, is not eaſy to determine.

Although Colophonia, among the moderns, is the ſame with Reſina nigra; yet among the ancients it was a liquid Roſin brought from Κολοφων, a town of Ionia in Aſia minor. " Manat & Reſina liquida tum e Pinu, tum e Picea. " Hæ ex Gallia & Hetruria convehuntur. Quin & olim e Colophone aſpor- " tabatur, quæ inde Colophoniæ cognomen ſibi vendicavit. Itemque ex " Gallia Sub-Alpina, quam incolæ nomine vernaculo Laricem appellant." *Dioſcor.* l. 1. c. 92. p. 50.

" Attra-

" Atramentum illud fuliginoſum, noſtratibus lamp-black dictum, nil aliud " eſt quam fuligo reſinæ vel picis concrematæ, propter quod officinas ædifi- " cant, fumum eum non emittentes. Olim ad atramentum ſcriptorium in uſu " erat, & ad colorandum. Adulteratur fornacum, balinearumque fuligine. " vid. *Plin.* l. 35. c. 6. *R. H.* 1403. See alſo *Dioſcorides*, l. 1. c. 96. p. 52.

SECT. II.

The true Venice Turpentine has all the virtues of B. Capivi; yea perhaps is not very much inferior to the Opobalſamum, being antiſeptic, diuretic, purgative, and vulnerary. It is commended inwardly for coughs, internal ulcers, gonorrhœas, fluor albus, ſtrangury, arthritic and nephritic pains, ſcurvy, &c. and outwardly for pains, wounds, and ulcers. The common Turpentine, and other Roſins, are of the ſame nature; but, becauſe leſs pure, coarſer, or more difficultly digeſted, are uſed almoſt only externally.

" Terebinthina, Terebinthina vulgaris, ſeu Reſina Laricis calfacit, emollit, " abſtergit. *Uſus præcipuus* intrinſecus in pulmonibus expurgandis, in gonor- " rhœa ſiſtenda (cum aqua plantaginis ac ſuccino): urinam ac alvum ciet. " Extrinſecus chirurgis uſitatiſſima eſt, fereque in emplaſtris omnibus adhi- " betur, movet enim pus, maturat, ſcabiei cutis medetur. N. ſunt qui Tere- " binthinam in cereviſia infundunt, atque ſimul defervere ſinunt pro potu " ordinario in præſervatione calculi, viſcerumque obſtructionibus. *Præp.* 1. " Spiritus, calfacit, ſiccat, attenuat, urinam ciet, tartaream mucilaginem re- " ſolvit. Hinc confert in tuſſi, aliiſque pulmonum affectibus tartareis, in " lienis & uteri obſtructione, in calculo renum & veſicæ, in ſtranguria, go- " norrhœa virulenta, ulceribus penis ex lue Venerea. Doſis a gr. iii. ad vj. " & ultra. 2. Oleum. 3. Balſamus. 4. Colophonia. 5. Oleum cœru- " leum. 6. Tinctura. 7. Sal volatile Terebinthinæ purgans. 8. Pilulæ de " Terebinthina cum Rhabarbaro." *Schrod.* 736. according to whom, Tere- " binthina eſt duplicis generis: Reſina ſcil. Terebinthi & Reſina Laricis, " Reſina Terebinthina eſt ea quam officinæ Terebinthinam Cypriam, Vene- " tam, appellant." He farther adds, " Excellit præ reliquis reſinis unde & " facultatibus præpollet. Confert intrinſecus præcipuè in tuſſi aliiſque pul- " monum affectibus (cum melle) in urina & alvo cienda: convenit epati, " lieni, renibus, veſicæ; expectorationi purulentæ ac phthiſi incipienti ſuccur- " rit, calculum pellit, arthriticos affectus juvat, uterum a ſaburra liberat. " Tereb. Laricea viribus iiſdem pollet, ſed imbecillioribus." 735.

" Terebinthi Reſina ex Arabia Petræa convehitur. Provenit tamen etiam " in Judæa, Syria, Cypro, Africa, & Cycladibus inſulis. Præfertur autem " magis perlucida, candida, vitreo colore & in cœruleum vergente, odorata " ac Terebinthum olens. Reſinas porro omnes Terebinthina antecedit: pro- " xima huic lentiſcina: deinde pinea & abiegna. Poſt has numerantur piceæ " reſina & ſtrobilina. Vis autem reſinæ cuivis molliendi, calfaciendi, diſcu- " tiendi (diſſipandive) & expurgandi. . . Urinam movent, cruda concoquunt " & ventrem emolliunt." *Dioſcor.* l. 1. c. 91. p. 50.

1. They are all more or leſs bitter, and aromatic; and differ little ſave in conſiſtence, cleanneſs, and proportion they contain of the æthereal ſpirit; afford-

ing the ſame principles by a chymical analyſis, but in different proportions: as the trees which yield them are of the ſame nature. — 2. They embalm animal ſubſtances, are friendly to nature; and the genuine fluid, pure Turpentines, may be numbered among the natural balſams. — 3. "Terebinthinæ Venetæ ℔ij. ℥xj. per B. V. diſtillatæ præbuerunt phlegmatis ſubacidi ʒiß; olei vero tenuiſſimi & limpidiſſimi ℥x. ʒviß; (in all ℥xi. ſo that there could remain only maſſæ ℔ij.) Maſſa reſidua, per retortam exhibuit phlegmatis acidi ℥ij. ʒij; phlegmatis urinoſi aliquantulum; olei flaveſcentis, paulo craſſioris ℥xij. ʒij. gr. liv; olei rufi & ſpiſſioris ℥xviiß. Carbo ſpongioſus levis reſid. pendebat ʒvj. gr. xij; unde cinerum gr. xxij. ex quibus nullus ſal lixivii ope extractus fuit." *Geoff.* ii. 501. But here the ſum is ℔ij. ʒvij. gr. lxvj. that is an ounce too much within gr. vj. and that without including the phlegmatis urinoſi aliquantulum. But ſuppoſing the error to be in the thick oil ℥xvij. for ℥xvj. and there were phlegmatis urinoſi gr. vj. Tereb. Venetæ ℥xliij. analyſed yielded phlegmatis ℥ij. ʒiij. gr. xlij, olei duplicis ℥xxxix. ʒv. gr. xviij. & carbonis fuerunt ʒvj. gr. xij. whence no ſalt, but only terræ gr. xxij. & jactura fuit ʒj.=the ſum ℔ij. ℥xj. or forty-three ounces.

"Analyſi chymica Terebinthinæ Chiæ ℔iiß. præbuerunt olei tenuioris, limpidi & aquei coloris ℥ix; olei flaveſcentis ℥v. ſpiſſioris vero & rufeſcentis ℥xxij; liquoris acidi gr. lx. Carbo pendebat ʒvij. gr. xxx. ex quo per horas octo calcinato, nihil ſalis fixi extractum fuit." *Geoff.* ii. 497. Thus from Tereb. Chiæ ℥xl. were got of phlegm gr. lx, of oil ℥xxxvj, carbonis ʒvij. gr. xxx: ſo that the jactura (which he omits, with the quantity cinerum) muſt have been ℥ij. ʒvij. gr. liv. Can the difference in the jactura be ſo great? Can no fixed nor volatile ſalt, and no more earth, be got from them? Can any thing be learned from theſe analyſes? Vid. *Proceſ.* 35. *Boerh. Chem.* ii. 146. ad 153. (viz. "Acetum, ſpiritus, oleum duplex, reſina, colophonia, deſtillatione per retortam facta, de Terebinthina.") Whence I ſhall notice only two things (α). "Notabile autem, quod ſemper illa aqua acida pergat exſtillare, quamdiu oleum illud exſtillat: non autem aqua ſola prius, & poſtea oleum." p. 148 N°. 4. and (β.) "Nihil autem in omnibus his mirabile magis, quam ſucceſſiva, ſpontanea, inſpiſſatio olei primi tenuiſſimi in ſpiſſitudinem renatam Terebinthinæ. Hujus in balſamum craſſius. Ejus iterum in reſinæ ſpeciem; ita tamen, ut minor copia acidi adſit in hiſce regeneratis, quam prius in nativis fuerat." p. 152. N°. 5. What is it that thickens them? not an acid ſure. — 3. The ſmalleſt quantity of Turpentine, or its ſpirit, oil, &c. not only taken inwardly, but alſo outwardly applied, ſoon makes the urine ſmell of violets. One can ſcarcely be half an hour in a newly varniſhed houſe, but the urine will have that ſcent. Oleum Juniperi has the ſame effect, as I obſerved above. Hence it may be ſaid to contain at leaſt ſome very ſubtile parts.

SECT. III.

Venice Turpentine may be given to ʒj; but I think ℈j. enough at a time, and the ſpirit to ℈ß. Some go much higher. Tar, if waſhed, is milder than Turpentine, and may be taken to ʒß. Terebinthina Cypria is in the Mithridate

date and Theriaca; Tereb. Veneta in the Balſamum Anodynum, and Balſ. Locatelli; oleum Terebinthinæ in the Sapo Tartareus; and one or other of the Turpentines or Roſins, in many plaiſters and ointments.

" Terebinthina in genere datur a ʒß. ad ʒj." *Herman.* " Datur a ʒj. ad " ʒij." *Albin. MS.* " Exhibetur a ʒß. ad ʒiß" *Geoff.* ii. 499. treating of the Cyprian: but the Veneta he gives to ʒß. in ſeveral preſcriptions, p. 504. The ſpirit he gives only ad guttas aliquot. " It is given a gut. iv. ad xij." *Lem. Chym.* 755.

BENZOIN.

SECT. I.

Benzoinum, Benivi, Aſa dulcis. *offic.* Belzoinum officinarum. *B. P.* 503. *R. H.* 1845. Benjoinum, cujus arbor folio citri. *J. B.* i. 2, 320. Benjoini, quod neque Græcis, neque Arabibus, neque Judæis cognitum. *Garz. Cluſ. Exot.* 155. Benzoin. *Park.* 1752. Benzoin or Benjamin.—This is a hard, brittle roſin, of a light brown colour, but marbled with intermixed whitiſh or yellowiſh drops, of a ſoft, ſubacid reſinous taſte, and very fragrant ſweet ſmell.

It is brought from the Eaſt-Indies, in pretty large maſſes, being the tear of a tree, wounded in the bark, about which Bontius and Garcias differ. Vid. *Dale*, p. 303. and *R. H.* Many believe it to be the ſame with an American tree, which is now no ſtranger in Europe, viz.

Benzoin. *B. J.* ii. 259. Arbor Benzoinifera. *Breyn. Prod.* ii. 16. Arbor Virginiana, citriæ vel limoniæ folio, Benzoinum fundens. *H. Amſt.* i. 189. Arbor Virginiana, piſhaminis folio, baccata, Benzoinum redolens. *Pluk. Phyt.* 139. *Alm.* 42. Arbor Benzoini Grimmi. *Ephem. Germ.* an. xi. p. 376? Laurus, foliis enervibus, obverſe ovatis, utrinque acutis, integris annuis. *H. Cliff.* 154. The Benjamin tree.

" Præfertur amygdaloides, quod maculas candidas amygdalarum inſtar re- " fert. Optimum cenſetur pellucidum, ſuaviſſime ſpirans, nec heterogeneis " inquinatum." *Dale* 303.

" The true Benjoin *en larmes*, which is rarely found in France, and where- " of the Siam ambaſſador's retinue brought a conſiderable quantity, is of a " golden yellow on the outſide, white within, ſtriped (or ſtreaked) with ſlen- " der, clear, white and red veins, friable, and without any taſte; but of a " ſweet and very aromatic ſmell: very different from the Benjoin *en larmes*, " commonly ſold at Paris, which is in a maſs, clear and tranſparent, of a red- " diſh colour, and mixed with white tears, like almonds, which got it the " name of Benjoin amygdaloide." *Savary's Dict.* i. 317. from *Pomet* chiefly, i. 181.

SECT. II.

It is as it were a ſolid balſam, called pectoral; and commended internally in coughs, aſthmas, conſumptions, &c. and externally as anodyne, diſcutient coſmetic, &c.

" Calfacit & ficcat 2. incidit, attenuat, pulmonicum eſt. *Uſus præcip.* in-
" trinſecus in affectibus pulmonum catarrhoſis, tuſſi, aſthmate. Extrinſecus
" in cerebro per ſternutationem expurgando, in odontalgia (maſticando), in
" tuberculis ac rubore faciei (abſtergendo:) ob ſuavem inſuper halitum cre-
" berrime ſuffumigiis commiſcetur. *Præp.* 1. Magiſterium. . . N. in ſp. vini
" rectificatiſſimo, unius horæ ſpatio ſolutio abſolvi poteſt, calore MB. ſaltem
" adhibito. 2. Flores. 3. Liquor, cum Albumine ovi. 4. Oleum. N.
" Benz. ℔j. præbet olei ʒiß. cryſtallorum ſeu florum ʒj. 5. Trochiſci de
" Benzoino." *Schrod.* 714. ad 716.

1. It is a pure roſin, rather more mild than balſam of Tolu; and ſmells ſweeter than balſam of Peru. " Eſt ſaporis fere expers, verum odor ſuaviſſi-
" mus, qui accenſo vegetior." *R. H.* " Saporis reſinoſi ac pinguis; odoris
" fragrantis ac ſuavis." *Dale* 303. " Saporis pinguis cum quadam dulce-
" dine; odoris ſuavis." *Herm. Cyn.* 658. " Saporis eſt ſubamari, odoris ſua-
" vis & grati." *Nucl. Belg.* 129. — 2. It yields a very ſubtile and ſomewhat ſingular ſal volatile oleoſum acidum, or oleum volatile, ſalinum, acidum, called Flores Benzoini; which riſe with a very gentle heat, and form into white ſlender needles, of a penetrating acidulous taſte: they diſſolve in ſpirit of wine, and are inflammable. Benzoini ℔j. will afford florum ʒj. according to *Schroder*; but ʒij. according to *Le Mort*, *Col. Chym.* p. 127. " Florum ſa-
" linorum ʒiß. vel etiam ʒij. per ſublimationem Benzoini ℔j. ſuppeditat, per
" decoctionem vero ʒj." *Geoff.* ii. 518. He calls them the eſſential ſalt, tho' he owns they do not diſſolve in cold water. " The flowers are of an agreeable
" ſmell, but ſtrong and pungent; and of a penetrating acid taſte. . . Theſe
" flowers, how white and pure ſoever they appear, are always un peu inflam-
" mables." *Lemery's Chym.* p. 758. ſo that they are an oily ſalt: but the ſalt which is got from the water with which a ſolution of Benzoin is precipitated, or from the water in which it is decocted or macerated, is properly called an eſſential ſalt, with which it ſeems remarkably to abound. " Quia ex ſolutione
" Benzoini, poſt præcipitatum magiſterium, repoſita, concreſcunt cryſtalli ſa-
" linæ, odoris Benzoini, ſaporis acerrimi, nonne hinc liquet ſale ſcatere Ben-
" zoin, ut qui in aqua, ad præcipitandam reſinoſam partem adhibita, ſolutus
" hæſit, & poſtmodum ex illa ſeparatus fuit? Si aqua, in qua macerata fuit
" Benzoe, ad medietatem extracta, & ſuperſtite repoſita ad chryſtalliſandum
" ſit, concreſcet pars ſalina Benzoes in cryſtallos, ſeu lapillos, notante Et-
" mullero." *Rieger. Introd.* ii. 130. — 3. The Flores Benzoini are very diaphoretic and diuretic, and perhaps preferable to the ſal ſuccini: they are commended in aſthmas, &c. " Proficui ſunt ad aſthma, & omnes pulmo-
" num & thoracis affectus. Doſis a ℈ß. ad ℈j." *Le Mort.* l. c. *Is* Mr. Geoffroy's *conjectural analyſis of any uſe?* ii. 518.

SECT. III.

Benzoin or its flowers may be given to ℈j. It diſſolves in common proof ſpirits. Its tincture is valued as a coſmetic; vid. *Boerh. Chem.* ii. 234. but it is not in uſe here. It is an ingredient, in ſubſtance, in the Tinctura balſamica, Pilulæ pectorales, & Ballamum traumaticum, *Pharm. Edinb.*

" Doſis

" Doſis florum a gr. iij. ad ℈ß." *Schrod.* and *Geoff.* who adds, " in liquore " conveniente ſoluti vel ſub forma boli, in aſthmate, pulmonum tuberculis, " & ulcere." ii. 519. " Doſe from gr. ij. to v. taken in an egg, or in ta- " blets." *Lemery's Chym.* p. 758. Is there any danger in giving ʒj?

LECTURE LXXIII.

CAMPHORA.

SECT. I.

CAmphora, Caphura. *offic.* Camphora officinarum. *B. P.* 500. Caphura. *Garc. Cluſ. Exot.* 160. C. Acoſtæ. *Ibid.* 259. Caphura quæ ſalicis folio dicitur. *J. B.* i. 2, 338. Camphora. *Park.* 1575. *R. H.* 1678. Arbor Camphorifera Japonica Breynii. *Cent.* i. 11. *R. H.* 1679. Camphorifera arbor, ex qua Camphora officinarum. *H. L.* 113. Laurus Camphorifera. *Kæmpf. Amæn.* 770. Laurus foliis ovatis, utrinque acuminatis, trinerviis, nitidis, petiolis laxis. *H. Cliff.* 154. Arbor Camphorifera, Japonica, foliis laurinis, fructu parvo, globoſo, calyce breviſſimo. *Breyn. Prod.* ii. 16. *H. Amſt.* i. 185. The Camphire tree of Japan.

Camphire is a white, almoſt pellucid, friable but ſoftiſh roſin, of a fiery hot, biting, bitter and aromatic taſte, and fragrant pungent ſmell, ſublimed from the Camphire tree in the Eaſt-Indies, and refined in Europe.

" Camphire is a clear, almoſt pellucid, white, friable, and very inflamma- " ble ſubſtance, of a ſtrong, piercing ſcent and taſte, of a very volatile na- " ture, eaſily waſting and evaporating away. It is brought over in flattiſh " broad cakes, convex on the one ſide, and concave on the other. . . It comes " from Japan, and the iſlands of Borneo and Sumatra." *Miller's Bot.* 104. " Duplex reſina ſub hoc nomine nobis affertur. Altera rudis, *Camphre brute* " vulgò, quæ in maſſas friabiles, compactas ex plurimis granulis ſemipelluci- " dis, rufeſcentibus, aut cinereis, ſalium granis ſimilibus, odore fragranti, " ſapore acri & ſordibus inquinata deprehenditur. Altera quæ Camphora " purgata, vulgo *Camphre rafiné*, reſinoſa eſt pinguiuſcula, candida, pellucida, " levis, ſub dentibus aliquantiſper lenteſcens, in panes ſeu maſſas orbiculares, " nonnihil concavas, nitidas coacta, quinque vel ſex digitos longas, unum " aut alterum latas; ſaporis acris, amaricantis, aromatici, totum os inflam- " mantis, cum quodam tamen frigiditatis ſenſu; odoris fragrantis roriſmarini, " ſed vehementioris. Ambæ illæ Camphoræ ſpecies una et eadem ſunt, nec " inter ſe differunt, niſi purgatione, quæ ſublimatione peragitur. Ex Japoniâ " occidentali & adjacentibus inſulis rudis in Belgium affertur, ibique repur- " gata, poſteà per totam Europam diffunditur." *Geoff.* ii. 520, 521.

It is a large tree, and very common in Japan, from which the Camphire is ſeparated by a very ſimple ſublimation. " Arboris Camphoriferæ Japonenſis " radix, truncus, rami, folia fiſſa conjiciuntur in ahenum, cui imponitur ca- " pitellum ſeu conus ex ſtramine, qui uſitatior, vel ſtoreis; vi ſubſtrati ignis, " quicquid volatile eſt expellitur, & lateribus coni ſe applicat, quæ deinde in

" maſſam

" maſſam cogitur, & ad nos transfertur." *Herm. Cyn.* p. 617. Here water is forgot. vid. *R. H.* 1678. " Extractio Camphoræ ruſticorum opus eſt, in " provincia Satzuma, & inſulis Gotho, qui radices & ligna in feſtucas com- " minuta, cum affuſa aqua coquunt in veſica ferrea, impoſitoque capitello " fictili, amplo, & (ne ex vapore erumpat) roſtrato, ſublimatam reſinam ex- " cipiunt, ſtramini quod capitellum replebat adhærentem." *Kæmpf. Amæn.* p. 770. *Lemery* (Chym. 761. & Dict. 104.) ſays the Camphire diſtills from the tree drop by drop on the ground, which when gathered is the Camphire brute. In *D. Joan. Freder. Gronovii Diſſertatio gradualis de Camphora. Lugd. Bat.* 1715. in 4to. there is an account of the manner of refining it in Holland; which is tranſcribed in *Geoff.* ii. 523. As for the Borneo Camphire, which is ſaid to be 100 times dearer in the Indies than the Japoneſe, and not to waſte in the air; and the Sumatra Camphire, if different, I know nothing of them, and never heard of their being brought to Europe.

About a dozen authors, who have written on this ſimple, are mentioned in *Seguierii Bibl. Bot.* We owe it to the Arabians, as its name ſhews, for they call it Cafur or Canfur; vid. *Cluſ. Exot.* 245. Garcias ſays Aëtius mentions it: Mr. Geoffroy and Hill alſo ſay the ſame; but I cannot find it in him, nor in any Greek author that I have. There is a Camphoræ herba in Myrepſus, but nobody takes it for Camphire: and *Adol. Wedelius*, in his *Diſſertatio inauguralis de Camphora (Jenæ* 1697. in 4to. *Seguier.* B. B. 311.) alſo writes, " Quod vero nonnulli ſcribunt Aëtium quoque Camphoræ meminiſſe, id vi- " dentur non inſpecto autore affirmare. Nobis ſaltem, hunc in diem, non " licuit id reperire, vel in Græco primæ partis codice, vel in Latina editione." *Bib. Pharm.* i. p. 463.

Authors ſay that Camphire may be obtained from the bark of the root of the cinnamon tree, from zedoary, ſchœnanthum, juniper, &c, " Ex men- " thæ quædam ſpecie Camphoram mihi quoque comparavi." vid. *Herm. Cyn. Boecleri*, p. 617. ad 621.

SECT. II.

Camphire is a very penetrating and ſtimulating attenuant, and diaphoretic; called alexipharmic, cephalic, and nervine; and commended inwardly in peſtilential, malignant, and nervous fevers, manias, melancholy, vapours, palſies, convulſions, lethargies, faintings, &c. (in furore uterino, ſpecificum audit); and outwardly for pains, inflammations, gangrenes, &c. as diſcutient and anodyne.

" Reſiſtit putredini ac venenis, unde frequens ejus uſus in peſte, maligniſ- " que morbis, febribus, &c. Veneris quoque ſtimulum arcere, conceptum- " que impedire creditum eſt: verum, ſi experientia ac obſervatio Scaligeriana " fidem meretur, citra veritatem (niſi uſu continuato id experiri quis velit); " ſuffocationi uterinæ ſubvenit (ſcil. aqua meliſſæ in qua Camphora extincta " fuerit propinata.) Uſus externus crebrior eſt, iſque potiſſimum in epithe- " matibus ſcil. frontalibus, refrigerantibus & paregoricis, quibus ut commiſ- " ceatur, ſolvi ſolet in ſpiritu vini, vel conteri cum nucleis, ſeu ſemine aliquo " oleaginoſo, *e. g.* pineis, ſem. citrulli & ſimilibus. . . *Præp.* 1. Oleum Cam- " phoræ. 2. Liquor. 3. Eſſentia, 4. Trochiſci de Camph." *Schrod.* p. 716.

1. It is extremely hot and biting, very ſubtile, volatile, and inflammable. "Facile flammam concipit, quam in mediis etiam aquis inextinguibilem per-"tinaciter retinet; ſub dentibus lenteſcens, & exigua portione, totum os veluti "inflammans, odore vehementi." *J. B.* "Saporis acris, amaricantis, aro-"matici, pinguis & lenti; odoris fragrantis & gravis." *Herm. Cyn.* 616. "Odoris eſt penetrantiſſimi & fragrantiſſimi: ſaporis acris, calidi, in ore "puſtulas excitans." *Nucl. Belg.* p. 55. "Saporis, &c. *Geoff.* ut ſupra. An actual cautery red hot is ſaid to feel cold: whether juſtly or not I know not. Camphoræ ʒß. expoſed to the free air, in thirty-three days loſt upwards of ʒij. whereas wrapt up in a bit of bladder it loſt only ℈j. more in three years. — 2. As it eaſily takes fire, and is difficultly extinguiſhed, ſo it conſumes intirely, leaving nothing behind it: and, as far as I can find, it is not in the power of art to analyſe it, or reſolve it into more ſimple conſtituent principles. Mr. Lemery attempted this ſeveral ways, but without ſucceſs: it ſublimed always without ſeparation, and was Camphire ſtill. vid. *Mem. Acad.* 1705. p. 47. where it was obſerved that (α) ſp. vini rect. ʒj. can diſſolve Camphoræ ʒß. ("ʒj. of highly rectified ſp. vini will take up Camphoræ ʒvj." *Lewis's Pharm.* p. 15): (β) ſpir. terebinthinæ, vel olei oliv. ʒj. diſſolves Camphor. ʒij: (γ) ſp. nitri ʒij & Camphoræ ʒj mixed produced olei ʒxß. without heat: (δ) aqua regia ʒiij turned Camphoræ ʒj to oil; ſpiritus ſalis had little effect: (ε) ol. vitrioli ʒiv diſſolved intirely Camphoræ ʒj, but did not turn it to oil. Spiritus vitrioli, aluminis, & aceti, made no ſolution; neither did (ζ) ſp. ſalis ammoniaci, nor oleum tartari per deliquium (four times its quantity of the volatile and eight times of the fixed alcali were taken:) and (η) that a ſolution of Camphire in ſp. vini, mixed with ſp. ſalis ammoniaci, coagulated. Hence it appears that Camphire is a ſingular kind of roſin, very homogeneous in its nature, and rather antacid than aceſcent, yea it appears to have no acid in it. "Acidi ſales ſola tantum deflagratione manifeſtos ſe pro-"dent." *Geoff.* ii. 526. "Si Camphora in aperto acre comburatur, nihil "prorſus cinerum, vel terræ poſt ſe relinquit; ſed tota in flammam diſſipatur, "& quædam ejus portio in atram fuliginem vertitur, nullumque acidum "manifeſtum præbet." *Idem.* p. 525. — 3. It is of great uſe in all caſes requiring heating diaphoretics, or a briſk ſtimulus in the nerves, eſpecially in lowneſs of ſpirits, melancholic and maniac diſeaſes. Vid. *Dr. Kinneir's* Letter, *Phil. Tranſ.* N°. 400. If Camphire be cooling, as the Arabs generally make it, ſpirit of wine is cooling too. And quod Venerem extinguat is as little conſonant to reaſon as it is confirmed by experience. vid. *R. H.* 1679. Some ſay it is narcotic; others that nimius ejus uſus vigilias facit. vid. *J. B.* others that it ſpecifically corrects cantharides. But I doubt of its having any of theſe effects, if judiciouſly adminiſtered. Omne nimium vitioſum.

Carolus Neumannus P. chymiæ at Berlin, thinks the Borneo Camphire a fiction. vid. *Phil. Tranſ.* No. 389. where there is an account of what he calls Camphora thymi: which, No. 390. Mr. Brown ſhews is only a congealed oil, in many things differing from Camphire: and that marjoram yields the ſame. See alſo No. 409. or *Abridgm.* vol 6. 2. p. 321. See alſo *New Diſpenſatory*, p. 103.

SECT.

SECT. III.

It is commonly given to gr. v: but there is no danger in ℈ß; and in maniacal diſorders the doſe may be ʒß. The ſpiritus vini Camphoratus has almoſt Camphoræ gr. xxxvij. in each ounce. Camphire is in the aqua ophthalmica, (though of no uſe there,) tinctura cantharidum, pilulæ fœtidæ, trochiſci albi Rhaſis, balſamum ſaponaceum, unguentum album camphoratum, ung. deſiccativum rubrum, ung. ophthalmicum.

" Its doſe is from gr. j. to vj. or viij." *Quincy's Pharm.* p. 158. " Doſis " a gr. iij. ad ℈j." *Geoff.* ii. 527. *Dr. Kinneir* gave it to ʒß to a woman of nineteen. vid. *Phil. Tranſ.* l. c. *vid.* Julepum e Camphora *Ph. Lond.* & Julapium hyſtericum Camphoratum. *Ph. Bat.*

CARANNA.

SECT. I.

Caranna. *offic.* Caranna. *B.P.* 503. *Monard. Cluſ. Exot.* 298. *Park.* 1576. *R.H.* 1847. Caranna Garciæ nomine data reſina. *J.B.* i. 2, 329. Tlahueliloca Quahuitl, id eſt arbor inſaniæ, Caragna nuncupata. *Hernander* 56. Caranna. —This is a ſolid but ſoftiſh roſin, of the conſiſtence of common pitch, of a dark brown or blackiſh colour, of a viſcous reſinous taſte, and pretty fragrant ſmell, eſpecially while burning; brought from New Spain, in thin little cakes, covered with leaves to prevent their cohering. But the ſurface ſoon becoming friable and duſty, the leaves fall away, and we only have it as the Dutch Caranna.

" Ex continentis parte interiore, per Carthaginem & nomen Dei defertur " reſina colore tacamahacæ, ſed ſplendidior, liquidior & denſior, lingua Indica " Caranna, odore tacamahacæ ſed graviore. . . . Medicamentum novum eſt, " quod decem annis elapſis primum huc illatum eſt." *Monard.* who is the firſt who deſcribes it. But ſince him authors differ much about it. Vid. *J. B. Herman, Dale, Miller, Geoffroy, Lewis.* " There is little of it that is right " to be had for ſeveral years." *Miller's Bot.* iii. vid. *Savary's Dict.* i. 544. " Foris ex cinereo nigricans; intus picei coloris, ſaporis viſcoſi amaricantis, " odoris dum accenditur fragrantis." *Herm. Cyn.* 656. and *Dale* 324. only he adds reſinoſi to the taſte. " It is a blackiſh, reſinous, friable gum, ſhining if broken; of a pleaſant ſmell while it is burning." *Miller's Bot.* 110. " Intus obſcura, fuſca; ſaporis reſinoſi, ſubamaricantis, ad myrrham aliquantiſper accedentis." (cætera ut Dale) *Geoff.* ii. 530. Vid. N.B. infra.

SECT. II.

It is uſed only outwardly as anodyne, and diſcutient, for pains, tumors, rheums, &c. but ſeldom now in Britain.

" Calfacit & ficcat 3. Viribuſque pollet iiſdem quibus Tacamahaca, qua " tamen operando citior & efficacior eſt, præcipue in tumoribus, omniſque " generis doloribus, maxime juncturarum, tumores inveteratos diſſolvit, de- " fluxiones frigidas aut mixtas ſiſtit, nervorum ac cerebri dolores ſedat, vul- " nera recentia præſertim nervorum & juncturarum ſola ſanat, defluxiones in " oculos & alias partes reprimit (pone aures, vel temporibus impoſita). (è Mo- " nard.) Solvitur in oleo. Præparatur inde emplaſtrum antipodagricum in- " ſigne. ℞ Carannæ ℥j. ceræ flavæ ℥ß. cum oleo verbaſci f. emplaſt." *Schrod.* 719. *Geoffroy* gives this plaiſter as his own.

N. B. " Eſt gryſeonigri coloris, odorem ſpirat lavendulæ, ſi fricetur aut ac- " cendatur; ſaporis eſt reſinoſi, viſcoſi, & amaricantis." *Nucl. Belg.* 129. " Caragne is a very rare gum in France; ſeldom found pure, others being " ſubſtituted in its place. It is white as it comes from the tree, but as it grows " old, it becomes of a greeniſh gray colour." *Savary, Dict.* i. 544. " The " ſorts which I have ſeen have rather reſembled ſtorax than myrrh, both in " taſte and ſmell, and appeared outwardly of a dark browniſh colour, and " upon breaking, of a brown with a caſt of red, variegated with irregular " white ſtreaks." *Lewis Ph.* 16.

It is reckoned more efficacious than Tacamahaca. " Sic ut quos Tacama- " haca non curarit Caranna ſanet. Exemplum vidimus in eo qui ob humeri " cruciatus jam multo tempore brachium movere non poterat, tametſi Taca- " mahaca uſus eſſet; ſed poſtquam Caranna uti cœpit, triduo ſanitati reſtitu- " tus eſt." ſays *Monardes.* " Diſtillatione oleum eſſentiale ſubtile, acre, ru- " brum, & ſumme odoriferum, ex ea extrahitur; a quo pendet ejus virtus " tumores reſolvendi, dolores ſedandi, & nervos roborandi, &c." *Geoff.* ii. 531. But where is the true Caranna to be found? Who diſtilled it? I know nothing about it.

COPAL & ANIME.

SECT. I.

1. Copal, Reſina Copal, Pancopal, *offic.* Reſina Copal, Copal, *Schrod.* 720. Reſina Copal, *R. H.* 1846. Copal Monard. *Cluſ. Exot.* 297. Gummi Copal, *Park.* 1670. Copal Monardi, *B. P.* 504. " Rhus Virginianum, Lentiſci " foliis, *R. H.* 1799. Rhoi obſoniorum ſimilis Americana, Gummi candi- " dum fundens, non ſerrata, foliorum rachi medio alata, *Pluk. Alm.* 318. " *Phyt.* 56. Reſina Copal, offic. *Dale* 315." Gum Copal—is a white, ſhining, ſomewhat tranſparent roſin, in pretty large pieces, hard and brittle, and odo- riferous, and fragrant, but leſs ſo than the gum Anime.

2. Anime, Gummi vel Reſina Anime, *offic.* Anime Monardi, *Cluſ. Exot.* 297. Anime ex Hiſpania nova ſive America, *B. P.* 499. Gummi Anime, *Park.* 1670. *R. H.* 1864. Gummi ſeu Reſina Anime, *Schrod.* 710. Gummi Anime—is a ſolid, but not very hard roſin, of a yellowiſh white colour, ſome- thing like the common frankincenſe, of a ſoft reſinous taſte, and very pleaſant fragrant ſmell.

Both are brought from New Spain; and are often confounded in authors, one calling Copal what another calls Anime. I follow Monardes, but cannot

warrant all the ſynonyma. " Duo reſinarum genera multum ſimilia ex Hiſpa-
" nia nova adferuntur, quorum unum Copal vocatur, alterum Anime. Copal
" Reſina eſt admodum candida, & lucida, & tranſparens, magnis fragmentis.
" Diacitro valde tranſparenti haud diſſimilibus, ſatis odorata, ſed non perinde
" ut Anime. Ea Indi in ſuis ſacrificiis, ſuffumigii loco utebantur. . . Anime
" eſt Reſina alba, ad Thuris colorem nonnihil vergens, verum Copali magis
" oleaginoſa. Defertur granis Thuris, ſed craſſioribus, quæ confracta, lu-
" teum colorem oſtendunt inſtar Reſinæ: gratiſſimi ac ſuaviſſimi eſt odoris,
" & prunis impoſita, facile conſumitur." *Monard.* l. c. Mr. Dale thinks Monardes, under the name Copal deſcribes the Anime, and è contra Anime by the name Copal: and yet he makes the Copal *B. P. Park.* and *R. H.* the ſame with his Reſina Copal offic. which are evidently ſynonyma of the Copal Monardi: though his deſcriptions differ from thoſe of Monardes. " What we in
" England call Gum Copal, is called Gum Anime in foreign parts: and, on
" the contrary, what they call Gum Anime we call Copal." (He means what we call Gum Anime, they call Copal.) *Miller Bot.* 223. Yet the French Gum Anime ſeems to be the ſame with his, being hard, tranſparent, and pretty like yellow amber; as *Savary* deſcribes it *Dict.* ii. 256, and being the roſin of a tree, called by the Portugueſe Courbaril: which is alſo *Geoffroy*'s Anime Americana, although he deſcribes Monardes's Anime, ii. 513.

Now ſince according to *Piſo* Copal is a general name for all the odoriferous gums and roſins of trees among the Indians; and *Hernandez* mentions eight ſorts of copalliferous trees: ſince there are oriental as well as occidental roſins called Anime; of which *J. B.* deſcribes five kinds: and ſince the roſin of the ſame tree may have very different appearances, according to the time and manner of collecting it, &c. no wonder that the hiſtory of theſe roſins is ſo perplexed and confuſed. *Cluſius* (*Exot.* 159,) has three oriental gum Animes, all very different from one another, of which one is thought to be the Cancamum Dioſcoridis, l. 1. c. 23. p. 19. and another the Myrrha Aminæa ejuſd. l. 1. c. 77. p. 42. Whence perhaps the Portugueſe, who brought the oriental Anime firſt to Europe, gave it the name Anime, or Aniimum; which is now rare to be found.

SECT. II.

They are called cephalic and nervine; and commended for pains, rheums, contractions of the nerves, palſies, contuſions, luxations, &c. as anodyne and diſcutient; but they are only uſed, and that externally, in ointments, plaiſters, fumigations, &c.

" Reſina Copal calfacit 2. humectat 1. emollit, reſolvit. *Uſus præcipue* in
" affectibus cephalicis. *Præp.* Oleum tenuius & craſſius: elicitur ut ex Ani-
" me." *Schroder.* 720.

" Reſ. Anime, calfacit 2. humectat 1. attenuat, reſolvit, aſtringit, diſcutit,
" cephalica eſt. *Uſus præcipuus* eſt externus in capitis ac nervorum affectibus
" frigidis dolorificis, catarrhoſis, flatulentis in affectibus articulorum, paralyſi,
" contractura, luxationibus, contuſionibus, &c. *Præpar.* Oleum ſtillat. fit
" per retortam ex arena. Colligi poſſunt ſigillatim oleum tenuius ac craſſius."
Schrod. 710.

They are aromatic roſines, and not acrid: ſo may be of uſe in warming and comforting the parts to which they are applied. "Gum Anime is little uſed "at preſent, and not often to be met with in our ſhops. Gum Copal is not "much uſed." *Miller, Bot.* 222. The Copal is uſed in verniſhes. "Sequentes vernices magni facit. *Koenius.* ℞ Gum. Copal ʒiv, maſtiches ʒij, "pulv. affunde ſp. vini rectificatiſſimi ℔ß. in vitro bene obturato leni calore "ſolvantur, dein in B. V. digerantur, & habebitur vernix elegantiſſima. "℞ Gum Copal, ſandarach. āā ʒiv, maſtich ʒiij, ſuccini elect. ʒvj, laccæ ʒvj, "reſinæ ſplendent. ʒj: pulveriſatis affunde S. V. rectificatiſſimi, ad eminentiam 6. digitorum, & in calore ſolvantur & digerantur." *Boecl. Cynoſ.* vol. 2. p. 694. Vide analyſin utriuſque apud *Geoff.* ii. 514.

ELEMI.

SECT. I.

Elemi, Elemni, Gummi Elemi, Reſina Elemi, *offic.* Gummi Elemi officinarum, *B. P.* 504. Elemi Reſina, *J. B.* 1. 535. Gummi Elemi, *Park.* 1586. *R. H.* 1847. Gummi Elemi, ſeu Elemni, ſeu Elevi, *Hoffm.* 217. "Arbor "Braſilienſis gummi Elemi ſimile fundens, foliis pinnatis, floſculis verticillatis, fructu Olivæ figura & magnitudine, *R. H.* 1546. Icicariba Braſilienſibus, cujus Reſina dicitur Icica, *Marcq.* p. 98. The Gum Elemi tree." *Dale* 308. Gum Elemi, or Gum Lemon—is a ſoftiſh, ſemipellucid roſin, of a yellowiſh-white colour inclining to green, of a reſinous bitteriſh taſte, and fragrant ſmell, ſomewhat like that of anethum. It is brought from the Weſt Indies, in long roundiſh cakes, wrapt up in leaves.

Many would have it to be the Lachryma Oleæ Æthiopicæ, *Dioſcor.* l. 1. c. 141. p. 72; and Elemi a corruption of ἐλαία; but without any reaſon. Vide *R. H.* 1847. and *Geoff.* ii. 532. "It is certain it cannot be the gum of "the Ethiopian olive, for it is ſaid that the gum of the olives will not burn "like roſin, nor melt with the heat of fire." *Park.* 1586. "Verum Elemi, "ſeu Æthiopicum, eſt reſina flaveſcens, vel ex albido tantillum vireſcens.... "Raro nunc in officinis occurrit." *Geoff.* ii. 531. Was it ever in the ſhops? *Savary* mentions three ſorts of roſines, which ſometimes paſs for Elemi; and alſo a way of counterfeiting it. Vide *Dict.* 1. 1791. and *Geoff.* ii. 434.

SECT. II.

It is commended for wounds, contuſions, fractures of the head, nerves, joints, punctures of tendons, &c. in ointment, plaiſter, tincture, &c. outwardly: and by ſome in gonorrhœas inwardly. But it is little uſed except in the Linimentum Arcæi.

"Calfacit temperate, emollit, digerit, reſolvit, maturat, dolorem ſedat, capitis "ac nervorum affectibus, eorundemque vulneribus, ac imprimis calvariæ vul"neratæ ſpecifice confert, contuſionibus articulorum prodeſt, menſes ac urinam

" ciet. *Præpar.* Oleum ſtillat. ſpecificum præ aliis (ut & ipſa reſina) cenſetur " in affectibus nephriticis, paralyſi, contractura." *Schrod.* 720.

It is a ſoft aromatic roſin, ſomewhat milder than turpentine, but we know little of the tree whence it comes. For the analyſis vide *Geoff.* ii. 533.

" Sapore eſt non ingrato, nonnihil acri & ſubamaro; odore fere fœniculi." *J. B.* & *R. H.* " Saporis reſinoſi & pinguis, odoris fragrantis, cum ſuavitate " graviuſculi." *Herman. Cynoſ.* 655. " Saporis moderate acris, & ſubamari, " odoris reſinæ fortioris, ad fœniculum accedentis." *Nucl. Belg.* 130.

LECTURE LXXIV.

LADANUM.

SECT. I.

LAdanum, Labdanum, Laudanum, *offic.* Labdanum, *Pharm. Edinb.* & *Dale* 232. cui & Ladanum, *offic.* " Labdanum Gummi Ciſti Ladani- " feræ Creticæ flore purpureo. T. Cor." *Pharm. Lond.* p. 11. Ladanum is a dark purpliſh-brown roſin, of an oily, warm, bitteriſh taſte, and very agreeable fragrant ſmell. It is brought to us in larger, or ſlenderer twiſted rolls, full of ſand and droſs; being gathered from the leaves of a ſhrub, growing in Candy, and ſome of the Archipelago iſlands, on which account it is called

Ciſtus Ledon Cretenſe, *B. P.* 467. *T.* 260. *R. H.* 1010. Ciſtus Ledon latifolium Creticum, *J. B.* 2. 9. Ciſtus Ladanifera Cretica flore purpureo, *T. Cor.* 19. *Voy.* 1. 29. C. Ledon Matthioli, *Ger.* 1289. C. Ladanifera Cretica vera, *Park.* 666. C. a qua Ladanum in Creta colligitur, *Bellon. Obſ.* l. 1. c. 7. p. 14. Ladanum Creticum, *Alp. Exot.* 88. Ciſtus Ladanifera, offic. *Dale* 232. The true Ladaniferous Shrub, Ciſtus, or Holly-Roſe. *N. B.* Nec in *B. J.* nec *H. Cliff.* invenio.

The leaves of this ſhrub, with which ſome ſandy dry hills in Crete are covered, in the hot ſummer months ſweat out this odoriferous roſin, at firſt clear, liquid, and ſhining, but ſoon ſullied by the duſt of the ſoil. The diſcovery whereof, as well as of the manner of collecting it, is by all antiquity attributed to the goats; which, browſing on the Ciſtus, loaded their beards, and long hair, with the Ladanum, which remarkably perfumed that ſtinking animal; and invited their owners to comb it from them. " At λαδανον, quod " Arabes λαδανον vocant, etiam Cinamomo mirabilius comparatur. Quippe " in graveolentiſſimo loco naſcens, tamen, fragrantiſſime olet." *Herodot.* l. 3. c. 112. *Bod.* in *Theoph.* p. 556. a. " Eſt & alterum Ciſti genus, Ledum a " nonnullis appellatum. . . . Fit autem ex eo quod Ladanum dicitur ſiquidem " cum Ciſti folia depaſcuntur capræ hircique, pinguitudinem conſpicue barbis " & femoribus, quoniam viſcoſa ſit, adhæreſcentem, excipiunt contrahuntve, " quæ depexa, colatur, & in offas efformata reponitur. Alii, attractis per " frutices funiculis, inhærentem iis pinguetudinem deradunt & in offas co- " gunt. Maxime vero probatur odoratum, ſub-viride, facile molleſcens, pin- " gue, arenæ ſqualoriſve expers, ac reſinoſum. Tale autem eſt quod in

"Cypro gignitur. Arabicum vero Libycumque vitius eſt." *Dioſcorid.* l. 1. c. 128. p. 64. Vide *Bod.* in *Theoph.* p. 551. ad 558. The modern manner of collecting it is deſcribed by Bellonius, l. c. by T. Voy. let. 2. vol. 1. p. 29; and Cornelius le Bruyn, in his Voyages: ſee *Savary Dict.* iii. 2. col. 195. 6. 7. briefly.

The inſtrument made uſe of in Crete reſembles a garden or hay-rake, without teeth; in place of which, two rows of long thongs or ſtraps of leather, are tightly fixed at one end to the head of this rake, the other end being looſe: the Greeks call it Ergaſtiri. Theſe ſtraps in the heat of the day (in July chiefly) the natives wave up and down upon, and ſo beat and bruſh the leaves of the Ciſtus till they become loaded with the Ladanum: it is then ſcraped off with knives, and made up into cakes. In a good day a man will thus gather about an oque (*i. e.* 50 ounces) of Ladanum, worth a crown on the ſpot: but it is hard labour. The beſt of it muſt be dirty: beſides, the peaſants knead it with the black ſand and duſt of the ſoil, or place where the ſhrubs grow. Vide *T.* &c.

"There are three kinds of Gum Labdanum in the ſhops; the fineſt is of a "ſhining black colour when broken, ſomewhat hard, but eaſily ſoftning by "heat, of an inflammable ſubſtance, of a ſweet pleaſant agreeable ſmell. The "ſecond ſort comes over in rolls, like Spaniſh juice of licorice, but is tougher, "harder, not ſo black, but more droſſy, and of a leſs fragrant ſmell. The "(third or) laſt and coarſeſt ſort, is made up in rolls, twiſted about like the "rolls of ſmall wax candle: this is full of ſand and droſs, and of a weaker "ſcent than either of the former." *Miller Bot.* 252. My friend Dr. *Fothergill* purchaſed the beſt of each of theſe kinds of Ladanum he could find in London. They tolerably agreed to the above deſcription; only the firſt did not ſmell near ſo ſweet and agreeably as the ſecond and third, though theſe were ſo full of droſs that the flame of a candle could not melt them. The fineſt was certainly much adulterated, if there was any Ladanum in it. I had alſo a ſecond ſort, which was more reſinous than the former ſecond ſort, and melted a little at the candle, but ſeemed to have leſs Ladanum in it than the coarſeſt. We have here commonly two kinds; one in larger thick and ſtreight rolls; and another in ſmaller twiſted rolls, which is the more droſſy of the two, but both equally fragrant: but I don't think one quarter of either of them is Ladanum; though what they do contain, ſeems to be pure and genuine.

N. B. I found that our Ladanum *in tortis* did not contain ſo much; for from 101 grains of it calcined I had cinerum gr. lxxij, which looked like a ſort of brick earth: ſo that not a third of it is combuſtible. I found alſo that alcohol diſſolved not fully a ſixth part of the ſame Ladanum: that is, alcohol diſſolved only gr. x. out of ʒj. gr. i. of the Ladanum *in tortis*.

It is λαδανον, ληδανον, or Ladanum, in every Greek and Latin author. Why then Labdanum in our Pharmacopœia? In Pharm. Lond. *edit.* 1721, it is Labdanum, or Ladanum, which was omitted in the preceding edition. The *New M. M.* retains Labdanum, though it be neither Greek nor Latin.

SECT.

SECT. II.

Ladanum, if pure, ſeems to agree with balſam of Peru. It is called cephalic, pectoral, nervine, and aſtringent; and commended in coughs, catarrhs, ſtrangury, dyſentery: but it is now uſed only externally as anodyne, diſcutient, and ſtrengthning, in balſams, plaiſters, perfumes, &c.

" Calfacit, ſiccat, emollit, digerit, maturat, attenuat, aperit, orificia venarum reſerat, inſpiſſat. *Uſus præcip.* in capite humido ac catarrhoſo, in dyſenteria, &c. Extrinſecus ejus uſus eſt in emplaſtris emollientibus, anodynis, tuſſim ſedantibus, in alopecia (inunge & coque in vino, & lava,) in odontalgia, in cardialgia, doloreque ventriculi, (cum modico bdellii faciunt pilulas dandas N°. 1. & 2. hora una ante paſtum. *Crato*,) in ſuffocatione uteri (introrſum adhibitum.) *Præp.* 1. Oleum ſtillat. 2. Pilulæ de Ladano. N°. 1. Coctione in aqua non niſi portiuncula minima ſolvitur; relinquitur pars major intacta, quæ non minus quam illa commoda eſt. N°. 2. Etſi inflammabile Ladanum ſit, non tamen pinguibus ſolvi poteſt." *Schrod.* p. 724. " Ladani oleum odoratum unguentarii hoc modo parare norunt. ℞ Ladani pinguis & præſtantiſſimi ℔j. In tenuiſſimas partes diviſum coquatur cum aq. roſarum ℥vj. olei amygdalarum dulcium ℥iv. per ſemihoram. Percoletur liquor oleoſus." *Geoff.* ii. 543.

1. It is ſomewhat bitteriſh, but neither acrid, nor nauſeous, and leaves in the mouth a very pleaſant perfumed flavour, which laſts a conſiderable time; and it has a very ſweet ſcent, more agreeable than that of the Peruvian balſam. " Ladanum offic. laudabile viſcidus eſt ſuccus, in magnas offas coactus, eaſque graves, ex purpura fuſcas, odore valido, ſed ſuavi, præſertim ſi calorem ſenſerit, cujus etiam beneficio molleſcit, veluti & manſum, ſaporem imprimans adſtringentem." *J. B.* 2. 7. " Odore valido ſed ſuavi, accenſaque gratum odorem halans." *R. H.* 1008. " Saporis amaricantis, odoris dum accenditur fragrantis & grati.', *Herman. Cyn.* p. 675. " Odoris grati & fragrantis, præcipue dum igni admovetur, ubi facile molleſcit & flammam concipit; ſaporis eſt amaricantis & ſubauſteri." *Nucl. Belg.* p. 132. — 2. It melts and flames in the fire, and diſſolves in ſpirits and oils. Some ſay it diſſolves in water. Though *Schroder* does not allow it to diſſolve either in water or oils. The quantity of droſs and ſand in it occaſions the difference. — 3. " Analyſi chymica, Ladani in panes orbiculares contorti ℔ij exhibuerunt phlegmatis rufeſcentis, odoris grati, & acidi ſaporis ℥ij. ʒij. gr. xlviij; liquoris fuſci, cum acidis tumultuantis ʒiijß; olei ℥j. ʒvij. gr. xxiv. Carbo pendebat ℥xxvj. ʒvij, qui calcinatus nihil aliud eſſe videbatur quam arena inſipida, ex qua fere nihil ſalis fixi extractum fuit." *Geoff.* ii. 542. Sum. ℥xxxj. ʒivß: ſo that the Jactura muſt have been only ʒiijß; for he does not mention it, nor the weight of the cineres. Hence he gives it a ſal eſſentialis ammoniacalis; and adds, " Sed inſuper videre eſt Ladani ℔ij. arenæ ℥xxiv. circiter continere, ac proinde, vix Ladani puri & genuini ℥iv. in ſingulis vulgaris Ladani libris continere." *Vide N. B.* ſupra. — 4. It is unfit for inward uſe unleſs purified; or in tincture with ſpirit of wine. Can decocting it in water ſeparate the heterogenous ſubſtances? It is now (though formerly in the empl. cephalicum) in none of our compoſitions. The *London Diſp.* orders in the emplaſtrum

emplaſtrum cephalicum, and empl. ſtomachicum, conſiderable quantities of the Labdanum molle; but where a genuine Ladanum molle is to be had I know not; it being ſoft, I think, only at firſt or liquid in the heat of the day in the ſummer, even in Candy. All the ſoft that ever I ſaw was evidently adulterated.

MASTICHE.

SECT. I.

Maſtiche, Maſtix, Reſina Lentiſcina, *offic.* Reſina Lentiſcina ſive Maſtiche, *B. P.* 501. Lentiſcina Reſinæ, Maſtiche, *J. B.* 1. 288. Reſina Lentiſcina Maſtiche dicta, *R. H.* 1580. Maſtick. — This is a ſolid, brittle, ſemipellucid, yellowiſh-white roſin, in ſmall, and commonly roundiſh drops, ſoftning in the mouth, without adhering to the teeth; of a ſubacid, agreeable reſinous taſte, and fragrant ſmell; which flows from inciſions made in the trunk, and larger branches of a tree, called

Lentiſcus, *offic.* Lentiſcus vulgaris, *B. P.* 399. *T.* 580. Lentiſcus, *Dod.* 871. *Lob.* 538. *Cluſ. H.* 14. *Ger.* 1432. *Park.* 1525. *R. H.* 1579. *J. B.* i. 285. Piſtacia foliis abrupte pinnatis, mas & fœmina, *H. Cliff.* 456. Lentiſcus offic. *Dale* 283. The Maſtic-tree — of which the Lentiſcus vera, ex inſula Chio, cortice & foliis fuſcis, Cat. H. Amſtel. in 8vo. p. 192. B. Ind. 2. p. 174. Lentiſcus offic. the Maſtick-tree of Dale 283, is but a variety, not a different ſpecies, according to Linnæus, who is certainly right. Vide *T. Voy.* vol. 1. let. 9. p. 144. where it is particularly deſcribed. "Male confunditur cum "Lentiſco vulgare, in Catalogo Plantarum uſualium horti Harlemenſis, cum "ſint duæ diverſæ ſpecies." *Dale* 283.

The Lentiſcs are not ſcarce in Provence, Languedoc, Spain, Italy, Sicily, &c. but yield little Maſtick, except in Scio: and even there all the Lentiſcs do not afford it. See for a particular account of the manner of collecting, managing, and diſpoſing of it, and of whatever is curious concerning theſe trees, *Thevenot*, in Harris's Col. vol. 2. p. 416. and *T. Voy.* l. c. and if you pleaſe *Bellon. Obſ.* l. 2. c. 8. p. 86, *Savary Dict.* iii. 523. I have a Lentiſcus vulgaris, *B. P.* which ſeldom fails when any way hurt in the bark in ſummer, to yield a ſmall tear of Maſtick. Lacuna, Matthiolus, and Cæſalpinus ſay the Lentiſcs of Italy afford ſome of this roſin, but *Bellonius*, *J. B.* and Mr. *Ray* never met with any of it. "Imported from Scio by Smyrna and the Archipelago, to "Marſeilles annually, between 70 and 80 quintals of Maſtick." *Carſ. Sav. Dict.* iii. 523. Scio is ſaid to afford yearly above 1000 cheſts of Maſtick, that is (a cheſt containing 90 oques,) 281,250 pound weight; of which 300 cheſts, or 84375 pounds are payable to the Sultan, according to Thevenot. Do none of the other Archipelago iſlands afford Maſtick?

N. B. "Chii humanitate reliquos mortales ſuperant, nec alium locum ſci-"mus in quo ſuavior vitæ ratio haberi queat, & fœminæ elegantioribus mo-"ribus & forma ſint præditæ; celebratæ olim pulchritudinis, adhuc amplum "teſtimonium præbentes, &c." Vide *Bellon.* l. 3. c. 8. p. 85.

SECT.

SECT. II.

Maſtick is antiſeptic and diuretic, milder than the Scio turpentine; called aſtringent, ſtomachic, nervine; and commended internally in vomitings, fluxes, ſpitting of blood, coughs, fluor albus, &c. and externally for pains, rheums, weakneſs of the nerves, &c. in maſticatories, plaiſters, fumigations, &c. The doſe in ſubſtance is ℈j.

" Calfacit & ſiccat 2. ſubaſtringit, emollit, ventriculum roborat. *Uſus præcip.* " in vomitu, nauſea, ac fluxu alvi compeſcendo. Obtundit ac corrigit pur- " gantium acrimoniam; reprimit exhalationes ventriculi, quæ caput alias fe- " rire ſolent (granis aliquot poſt paſtum deglutitis,) roborat caput nervoſum- " que genus; expuitioni ſanguinis, ac tuſſi medetur, emendat oris halitum, " pituitam e cerebro elicit (maſticando). Extrinſecus uſus ejus creberrimus " eſt in dentrificiis, emplaſtris, ac cataplaſmatis ſtomachicis. N. coquitur ʒß " in aquæ ℔iij. vel iv; daturque pro potu ordinario in diarrhœa. *Præpar.* " 1. Oleum ſtillat. ſeu flavum. 2. Oleum rubrum ſeu balſamus. 3. Oleum " per deliquium albumine ovi. 4. Oleum Maſtichinum. (Coctione in oleo.) " 5. Spiritus Maſtiches. 6. Sp. vini Maſtichatus. 7. Aqua Maſtichina. F. F. " 8. Pilulæ Maſtichinæ." *Schrod.* p. 625.

1. It is a pure roſin, agreeably aromatic, rather acidulous than aſtringent; and eaſily diſſolves in oils, or ſpirits; yea almoſt diſſolves in the mouth. " Odorem non ingratum ſpirat. Sapor leviter aſtringens, cum calore mo- " dico." *J. B. R. H.* " Saporis reſinoſi & aſtringentis; odoris fragrantis." *Dale* 282. " Saporis eſt leniter auſteri, odoris ſatis grati." *Nucl. Belg.* p. 188. " Prunis injecta flammam concipit, odorem non ingratum ſpirat, & ſapore " donatur leviter aromatico, reſinoſo & ſubaſtringente." *Geoff.* ii. 544.——

2. The folia, cortex, and lignum Lentiſci are reckoned aſtringent, and were uſed as ſuch by the antients. " Ad ulcera in utero reſiccanda argenti florem " in vino terito ac infundito. . . . Aut Lentiſci folia (σχινε φυλλα) in aqua co- " quito & cum hac poſtea colluito." *Hippoc. De Morb. Mul.* l. 1. ed. *Lind.* p. 633. He uſes them alſo ad fluores muliebres, p. 668. " Lentiſcus nota " arbor eſt, partibus ſui omnibus aſtrictoria. Etenim ipſius fructus, folium, " ramorum & radicis cortex pares vires ſortiuntur. Exprimitur & ſuccus ex " cortice, radice ac foliis ſufficienter in aqua decoctis. . . . Acaciæ & Hypo- " ciſtidis vice ipſo uti licet. . . . E Lentiſco quoque reſina naſcitur, Lentiſcina " cognominata, & a nonnullis Maſtiche . . . præſtantiſſima & copioſiſſima in " inſula Chio provenit, &c." Vide *Dioſcor.* l. 1. c. 89. & 90. But thus it is not much uſed here: neither do we value tooth-picks made of its wood.——

3. The chymical analyſis explains nothing. " Analyſi chymica ex Maſtiches " ℔ij. prodierunt liquoris acidi ʒiv. ʒijß; olei fluidi ʒijß. gr. x; olei ſpiſſioris " ʒxx. Carbo pendebat ʒiij; unde cinerum ʒiij, ac inde ſalis fixi ſalſi gr. iv. " (ergo terræ ʒij. gr. lxviij), & Jactura fuit ʒij. ʒj. gr. xxvi." *Geoff.* ii. 546. where it is much commended; as is alſo a decoction of the wood, from the authority of a German phyſician (in *Ephem. Germ.* Dec. 3. an. 9. & 10.) who calls it aurum potabile vegetabile. In a word, Maſtic is a ſort of mild ſolid balſam. It was of old, and ſtill is much uſed in Turkey as a maſticatory. I tried it, but it made my gums, &c. tender and ſomewhat ſore; ſo that I laid it aſide. At, *inde nomen!*

It

It is an ingredient in none of the compoſitions *Pharm. Lond.* and is only in the magma hedychroi, & empl. defenſivum *Pharm. Edinb.* ed. 1744.

STYRAX.

SECT. I.

Styrax, Storax, S. calamita. *offic.* Styrax, ſive Storax officinarum; quia ſtriatim ex arbore exſtillat. *B. P.* 502. Styrax calamita officinarum. *J. B.* i. 2, 345. Styrax ſuccus; officinis Styrax calamita. *R. H.* 1680. Storax—is a ſoftiſh ſolid roſin, made up of drops (or grains) of a yellowiſh or reddiſh colour; of a ſoft, reſinous, aromatic taſte, and moſt fragrant ſmell, ſomewhat reſembling that of the balſam of Peru. Of this *Mr. Lewis*, Pharm. p. 65. makes the two ſorts, following Mr. Geoffroy, who owns however that they do not really differ. "Prima eſt Styracis lachryma quæ ex tenuioribus arboris "rimis, vel inciſuris guttatim ſtillat, & citiſſime exſiccata fuit atque collecta. "Altera vero ſuccus eſt ex grandioribus vulneribus uberius diffluens, qui "nonniſi poſt diuturniorem moram inſpiſſatur; ita ut acris calidioris contactu "rufeſcat vel nigreſcat antequam exſiccetur." *Geoff.* ii. 566. This I reckon only a conjecture. For the ſize of the grains we ſee very different in maſtick, myrrh, olibanum, &c. And as for the conſiſtence, it ſeems purely owing to age. The *Cod. Med.* has only St. cal. & St. liquida. However, our

Styrax calamita. *offic.* is in lumps or maſſes of a coarſe grain, and reddiſh-brown colour, compoſed of ſome true Storax, and a great deal of bran, ſawduſt, or ſome ſuch ſtuff, but very odoriferous and ſweet ſmelled.

This is the Styrax *Pharm. Lond.* and we have no other: and the Storax it contains is as good as, if not preferable to, any that I have ſeen; but muſt be ſeparated from the droſs, before it is fit to be uſed inwardly. According to Cordus, (vid. *J. B.* i. 2, 342.) a pound of this Storax will not afford an ounce of the true roſin: but I found that ſp. vini diſſolved near one half of it, without heat: and it is thus ſtrained; "Styracen calamiten coque in aqua, donec "molleſcat, deinde prelo exprimatur inter laminas ferreas tepefactas, & Sty-"rax purificatus ab aqua ſeparetur." *Pharm. Lond.* p. 25. Upon this *Dr. Pemberton* remarks,

"The Storax being a reſin only ſoftens by the heat of the water, but does "not diſſolve in it." *Diſpenſ.* p. 152. But will it not by coction loſe ſome of its proper ſpirit? Is it not better extracted ſp. vini? "Scobs quædam lig-"nea, nonnihil reſinoſa, odore Styracis perfuſa, venalis proſtat in officinis, "quæ ſcobs Styracina, *Sarrilles de Storax*, vulgo dicitur. Ad uſum medicum "inutilis eſt, & prorſus abjicienda." *Geoff.* ii. 566. But I ſuſpect that his Styrax vulgaris, ſeu in glebas compactus. *offic.* vulgo *reſine de ſtorax*, and his Styrax calamita, *off.* vulgo *Storax en larmes*, are both factitious or adulterated; and made up, perhaps, in the countries where they are produced, into the form in which we get it. The tree that produces the Styrax is ſaid to be the

Styrax folio mali cotonei. *B. P.* 452. *T.* 598. Styrax arbor. *J. B.* i. 341. *Ger.* 1526. *R. H.* 1680. Styrax arbor vulgaris. *Park.* 1529. Styrax. *Lob.* 579. *H. Cliff.* 187. Styrax offic. *Dale* 297. The Storax tree,—which grows in

Italy, Crete, &c. Thus, "In insulis Massiliensibus & locis calidioribus." *Herm. Cyn.* 662. "In Italia, Sicilia, &c. oritur." *Dale* 297. "It grows in "the eastern countries, as also in Italy, where it yields no gum, that being "brought from Turky." *Miller* 427. "It comes from Arabia and Syria to "Marseilles." *Savary's Dict.* ii. 1631. "Ex Syria aliisque Indiæ Orientalis "locis per Massiliam nobis affertur." *Geoff.* ii. 566.

This is generally supposed to be the στυραξ Hippocratis (*de Morb. Mul.* l. 1. p. 620. lin. 25, &c.) et antiquorum; though Dioscorides, l. 1. c. 79. p. 44. says, "Est admodum acris qui fraudis expers est." vid. *Plin.* l. 12. c. 25. & *Bod. in Theoph.* 1029.

2. Styrax liquida. *offic.* Styrax liquidus cordi. *B. P.* 502. Storax liquidus ruber officinarum. *J. B.* i. 345. Styrax liquidus. *R. H.* 1681. Styrax liquida offic. *Dale* 298. Liquid Storax.—This is a soft resinous substance, of the consistence of honey, of a grayish or reddish-brown colour (which make two sorts of it, called in Holland the white and the black liquid Storax), of an oily subacrid aromatic taste, and fragrant smell. The white smells like Storax; the black is more strong and sooty smelled. There is also a pellucid kind, called S. l. finissima.

The Arabians, I think, first mention a liquid Storax: for it does not appear to be the "χρισμα στυρακινον, Styracinum unguentum, quod ex eo in "Syria conficitur." *Dioscor.* l. 1. c. 79. Serapion's liquid Storax is the oil expressed ex nucleis arboris Storaci fluæ; and Avicenna's Styrax humidus is made by decocting the bark. *Sebrod.* 743. Cordus and others think it a factitious compound, (vid. *J. B.*); others that it is a native rosin; as Bellonius, (vid. *J. B.*); while Mr. Pettiver makes it a kind of birdlime or viscum; tho' it is very inflammable, and resinous, but not very viscous. Probably it is all factitious. Vid. *Dale.* It is little used, and expelled the *London M. M.*

"Rosa Mallas grows upon the island Cobrosi, at the upper end of the "Red Sea, near Cadess, which is three days journey from Suez. It is the "bark of a tree (which is taken off every year and grows again) boiled in "salt water till it comes to a consistence like birdlime, then separated, and "put into a cask, and brought to Judda, and so to Mocha, in June and July, "where it sells from 60 to 120 dollars per barrel, according to its goodness. "The best is what is freest from clay and dirt, which is commonly mixed "with it: and the way to try it is to wash it in salt water, which will cleanse "it. The Arabs and Turks call it Cotter Mija. A barrel is 420 lb." Thus *Pettiver*, *Phil. Trans.* No. 313. Geoffroy on this article has little but what he borrows from Dale, as Dale borrows from Schroder; though neither own to whom they are so much obliged.

"It ought to be of a gris de souris, Storax smell, good consistence, with-"out filth or moisture, and true Dutch. Much comes from the Levant, "particularly Smyrna, whence is brought *com. an.* 2000 occos." vid. *Savary's Dict.* ii. 1632.

SECT. II.

Purified Storax has the virtues of ladanum or balsam Peru, and Benzoin. It is called cephalic, nervine, and pectoral; and commended internally for coughs,

coughs, hoarſeneſs, colics, ſinking of the ſpirits, &c. and externally as anodyne and diſcutient: and thus only the liquid Storax is uſed, for tumors, contuſions, &c.

" Calfacit, exiccat, emollit, concoquit, cephalicus inprimis eſt, & nervi-
" nus; medetur tuſſi, catarrhis, raucedini, gravedini; vulvæ præcluſæ duri-
" tieve laboranti, extra & intra datus, convenit: immiſcetur cardiacis et læti-
" ficantibus; alvum leniter mollit, ſi cum terebinthina in forma catapotii aſ-
" ſumatur. Extrinſecus ſuffitu capiti adhibetur. *Præp.* 1. Oleum ſtillat,
" cujus gutta auribus inſtillata ſibilum diſcutit. 2. Ol. coctum. . . De oleo
" Styracino refert Dioſcorides, quod calfaciat vehementer & emolliat, verum
" caput dolore afficiat gravetque & ſaporem adferat. Quæ facultates in Sty-
" race liquido deprehenduntur." *Schrod.* 742.

It is not acrid, but a very fragrant roſin, and comes near in ſcent to the Peruvian balſam. " Saporis ſubacris, lenti aromatici, odoris ſuavis." *Herm.* l. c. " Saporis ſubacris, reſinoſi, odoris fragrantiſſimi." *Dale* 297. " Sapo-
" ris ſubacris, odoris ſuavis, fere inſtar balſami Peruviani. Optime diſſolvitur
" in ſpirituoſis." *Nucl. Belg.* 280. " Sapore reſinoſo, ſubacri, non ingrato;
" odore fragrantiſſimo, præſertim ubi prunis injecta fuerit." *Geoff.* ii. 565.
" Analyſi chymica ex Styracis puriſſimi ℔ij prodierunt phlegmatis acidi ℥ij.
" ʒvij. gr. xlviij; olei eſſentialis limpidi, rufeſcentis ℥j. ʒvß; olei ſpiſſioris,
" cum floribus ſalinis Benzoini floribus ſimilibus permixti ℥ij. ʒij; tandem
" olei fluidi, rufi, aliquantiſper empyreumatici ℥iij. ʒiij. Maſſa nigra ſuperſtes
" pendebat ℥ix. ʒv; unde cinerum ℥iß, ac inde ſalis fixi ſalſi gr. vij. Jactura
" fuit ℥iv. gr. lx." *Geoff.* ii. 567. So there were terræ chymicæ ʒxj. gr. lxv. N. B. The ſum being but twenty-four ounces, the pound here muſt conſiſt of twelve ounces only, or the analyſis is very faulty.

When I poured water into the ſolution of Storax in alcohol in order to precipitate the roſin, and filtered it, the water came through whiter than whey, and what remained continued long ſoft; I could obtain thus no more than gr. vij. though gr. xxx. were diſſolved of Storacis ʒj.—The ſolution was made in May 1749: and in March 1752 it was ſtill ſoft. Is it on this account that ſo much heterogeneous ſtuff is mixed in it?

SECT. III.

It may be given to ʒj. It is an ingredient in the mithridatium, theriaca, pil. e Styrace; and the liquid Storax in the empl. mercuriale.

TACAMAHACA.

SECT. I.

Tacamahaca. *off.* Tacamahaca. *B. P.* 503. Monard. *Cluſ. Exot.* 298. *Park.* 1608. *R. H.* 1846. Tacamahaca—is a ſolid or dry roſin, in lumps compoſed of grains of different colours and ſizes, of a bitteriſh reſinous aromatic taſte, and fragrant ſmell, ſomewhat like that of maſtick.

" There are two ſorts of this gum; one in lumps which is dry and reſinous, " crumbling at firſt between the teeth, but when chewed a while ſticking to- " gether, made up of little yellow reddiſh grains clinging together, of a plea- " ſant ſtrong ſmell, ſomewhat like maſtich; the other ſort is what is called " Tacamahac in the ſhell, being of one texture, ſmooth, and in colour like " ſtrained galbanum, of a pleaſant ſmell like the former." *Miller's Bot.* 430. " Tacamahaca vulgaris in granis, vel in glebis albicantibus, flaveſcentibus, " rufeſcentibus, vireſcentibus, aut variegatis ſemipellucidis habetur, odoris " fragrantis." *Geoff.* ii. 570.

It is brought from America. Monardes is the firſt author who mentions it. " Defertur ex Nova Hiſpania, gummi ſeu reſinæ genus, ab Indis Tacama- " haca vocatum. Colligitur vulnerata arbore magna ut populus, admodùm " odorata, cujus fructus ruber eſt, pæoniæ ſeminis modo. Colore eſt galbani " unguibus albis uti ammoniacum, odore gravi, atque etiam ſapore, ita ut " prunis injecta, & naribus admota, mulieres uteri ſuffocatione laborantes " ilico liberet." *Monard.* l. c. " Tacamahaca in conchis . . eſt odoris aroma- " tici fragrantiſſimi & ſuaviſſimi, ad lavendulæ & ambari cineracei odorem " accedentis, ſaporis reſinoſi, aromatici. Raro admodum in officinis reperitur. " Altera ſpecies vulgaris eſt. . Odoris fragrantis, ad prioris odorem accedentis, " ſed minus grati." *Geoff.* ii. 570. The tree which affords it grows in New Spain and Madagaſcar, according to Lemery, Savary, Geoffroy, &c. And it is ſuppoſed to be the

Arbor Populo ſimilis reſinoſa altera. *B. P.* 430. Tacamahaca populo ſimi- lis, fructu colore ſimilis (*pro* ſeminis) pæoniæ. *J. B.* i. 2, 346. Tacamahaca foliis crenatis, ſadelhaut, ſeu lignum ad ephippia conficienda aptum. *Par. Bat.* prod. 379. *Pluk. Phyt.* 228. Populo ſimilis arbor reſinoſa altera. *B. P.* Ta- camahaca, Ibid. *B. J.* ii. 211. Tacamahaca. *off.* The Tacamahac-tree. *Dale* 302. Vid. *Mill. Dict.* v. 2.

SECT. II.

It agrees with caranna or elemi in virtues; and is uſed only as anodyne and diſcutient, in plaiſters, &c. for pains, tumors, rheums, &c.

" Calfacit in principio 3. ſiccat 2. validæ aſtrictionis particeps; digerit, re- " ſolvit, maturat, tumores emollit, dolores ac flatus diſcutit: uterina inprimis " eſt nervina & cephalica. *Uſus* præcipue externus eſt. Prunis injecta, nari- " buſque admota, mulieres uteri ſuffocatione laborantes ilico liberat. Umbi- " lico emplaſtri modo impoſita uterum ſuo loco retinet (uſu familiariſſimo.) " Ventriculum roborat, defluxioneſque quaſcunque e capite defluentes repri- " mit (linteo excepta, & poſt aurem alteram ſaltem, vel utramque applicata, " ſuffituve attracta.) Temporibus adhibita (cerati modo) defluxiones in ocu- " los, aut alias facie partes, revellit, dolorem dentium ſedat (dentibus etiam " corruptis indita:) abdomini emplaſtri inſtar impoſita, uteri fluxum cohibet: " magnæ eſt efficaciæ in doloribus articulorum (coxendicis), junctura rum ac " nervorum vulneribus impoſita eadem curat, nimirum ſtatim ſuppurare facit " & ſpaſmum prohibet. *Monardes.* N. 1. Adeo celebris eſt apud Indos ut ad " qualemcunque dolorem adhibeatur, nec aliud remedium norint, modo non " adſint

" adsint inflammationes admodum calidæ. N. 2. Inveteratos cruris dolores " Tacamahaca emplastri loco imposita curatos vidi. *Præp.* Emplastrum sto- " machicum." *Schrod.* 744.

It is a pure rosin, bitterish, aromatic, and not disagreeable to the taste, and of a pleasant scent. " Saporis aromatici, resinosi odoris fragrantissimi." *Herm. Cyn.* 656. " Saporis aromatici, resinosi odoris fragrantis." *Dale* 302. " Sa- " poris subamari, odoris fere carannæ." *Nucl. Belg.* 135. " Sub dente in " pulverem diffilit primum, mox rursum recolligitur, lentescensque pro arbi- " trio ducitur. Sapore est amaricante haud ingrato & aromatico. Suffita " jucundum spirat odorem, & mastiches fere æmulum, minus vehementem " & suaviorem, nulloque relicto crassamento consumitur. Importatur cucur- " bitino cortice comprehensa. De Tacamahaca ita Joannes Posthius, p. m. " cecinit.

" Indomitam lenit si Tacamahaca podagram
" Et omne corporis pathos;
" Illam ego prætulerim, quas venditat India gemmis
" Arabumque gazis omnibus.
" Nam quis divitiis validos non præferat artus,
" Tristique sensu liberos." *J. B.* i. 2, 347.

Hence it seems first to have come in the gourd shells, which probably is the true genuine Tacamahac; which is rare now-a-days. What I have in the shell smells like lavender and ambergris. It is expelled the *London M. M.* But *ours* retains it.

" Analysi chymica Tacamahacæ ℔ij præbuerunt phlegmatis acidi ʒiij. ʒv; " olei triplicis ℔j. ʒvj. ʒij. Carbonis fuere ʒij. ʒiij. gr. lxvij; unde cinerum " ʒj, sed inde nihil salis; & jactura fuit ʒiij. ʒv. gr. xxv." *Geoff.* ii. 570; who adds, " Raro interne usurpatur. A quibusdam in pectoris affectibus " commendatur; sed externo usu est frequentissima. Ad quoscunque partium " externarum dolores compescendos, utiliter præscribitur, præsertim ab hu- " moribus frigidis & flatulentis oriundos. . . Specificum expertum in dolore " ventriculi a Poterio prædicatur. Et Michaelis feliciter utebatur in febribus " malignis, ubi de anxietate præcordiorum ægri conquerebantur. Idem illius " emplastrum commendat Etmullerus in vomitu compescendo. Capiti im- " posita cephalalgiam sublevat, & catarrhos cohibet: nervorum, tendinum " & articulorum vulneribus conducit. Hocsteterus (*in obs.*) empl. de Tacam. " capiti raso admoto, surditatem se curasse refert." *Geoff.* ii. 571.

It is an ingredient in the bals. anodynum (*vulgo* Guidonis), emplastrum anodynum, emplastrum antihystericum, cephalicum, stomachicum, & volatile. *Ph. Edinb.* edit. 1744.

III. GUM-ROSINS.

ALOE.

SECT. I.

1. Aloe, Aloe Succotrina, *offic.* Aloe Succotrina, quasi succo citrino; vel potius Socotrina, a solo natali Socotra insula. *B. P.* 495. Succotrine or Soco-

torine Aloes.—This is the inſpiſſated proper juice of the Aloe Succotrina anguſtifolia, ſpinoſa flore purpureo. *Breyn.* prod. ii. 12. *H. Amſt.* i. 91. *T.* 366. *R. H.* iii. 569. Aloe vera minor. *Munt. Aloed.* 20, 21. *B. J.* ii. 129. Aloe Americana minor; foliis per margines frequentiſſimis & molliuſculis ſpinis armatis. *H. L.* 16. Aloe Indiæ orientalis, ſerrata, ſive Succotrina vera, floribus phæniceis. *H. Beaum.* 5. Aloe Succotrina. *offic.* Succotrine Aloes. *Dale* 249. —It is of a ſhining black colour, friable, and when powdered yellow; of a nauſeous and very bitter taſte, and ſomewhat ſtrong, but not very diſagreeable ſmell.

It grows in both the Indies. That from Zocotra, or Zocotora, an iſland in the oriental ocean, near the gulf of Babelmandel, is moſt eſteemed. It comes in ſkins from the Eaſt-Indies. "It is blacker, and more ſhining and "brittle, than the hepatic aloes, and, when powdered, of a fine yellow colour, "not apt to clod together after it is powdered, and of but little ſmell in com- "pariſon to the other." *Miller's Bot.* 26. Authors, as *Schroder*, *Geoffroy*, &c. mention a tranſparent Aloes called Aloe lucida; but I could never meet with it. The Barbadoes Aloes is more pellucid, if very thin, than any Succotrine that I have ſeen.

2. Aloe hepatica, Aloe Barbadenſis. *offic.* Hepatic or Barbadoes Aloes—is of a brown liver colour, and more offenſive or fœtid ſmell than the Succotrine. It is the juice of the Aloe vulgaris. *B. P.* 286. *T.* 366. *H. Ox.* ii. 414. *R. H.* 1195. Aloe. *Dod.* 359. *J. B.* iii. 696. Aloe vulgaris ſive ſempervivum marinum. *Ger.* 507. *Park.* 149. Aloe vera vulgaris. *Munt.* Aloed. 17. Aloe Dioſcoridis. *Colum.* i. 40. Aloe Dioſcoridis & aliorum. *Sloan. Cat. Jam.* 15. *Hiſt.* i. 245. Aloe. *offic.* Common Aloes. *Dale* 248. Aloe, foliis ſpinoſis, confertis, dentatis, vaginantibus, planis maculatis. *H. Cliff.* p. 130. The common Aloe. It is a native of both Indies, &c.

"Cum florentes non examninaverim, an ſpecie differant difficile eſt deter- "minatu; a facie tamen conjunctionem poſtulant. Beſlerus flores Aloes vul- "garis in ſcapo ramoſo pingit; Commelinus vero Aloes Succotrinæ ſcapo & "floribus ſequentis (*i. e.* Aloes Africanæ, cauleſcentis; foliis magis glaucis, "caulem amplectentibus, & in mucronem obtuſiorem deſinentibus. *Commel.* "rar. p. 44. cujus ſcapus non ramoſus,) ſimillimos exhibet." *Lin. H. Cliff.* p. 131. In the beginning of the winter, 1747, a Succotrine Aloes put out its flower ſtem, which was a large ſpike, very thick with flowers, but not branched: the froſt killed it before any opened, through the negligence of the gardener.

3. Aloe Caballina. *offic.* Aloe Caballina (quod equis & veterinariis dicata ſit) livida, arenoſa. *B. P.* 495. Horſe Aloes.—This is reckoned by ſome to be only the more feculent part of the common hepatic Aloes: by others, to be the juice of the Aloe Guineenſis, Caballina, vulgari ſimilis, ſed tota maculoſa. *Commel.* præl. 40. *Dale* 249. "*Uſu.* Succus inſpiſſatus, cujus pars im- "purior, arenoſa, ſordibus conſpurcata, & idcirco nigricans Aloe Caballina "dicitur. Pars purior, colorem hepatis referens, Aloe hepatica vocatur. "Caballinam vocat Commelinus, quia fractis foliis ſuccus Aloen Caballinam "redolet." *Dale* l. c. How does this differ from the Aloe vulgaris? "Col- "ligitur Aloe Succotrina in inſula Succotra, quod in fundo ab illa fæculen- "tum remanet, id Aloem Caballinam conſtituit, differuntque plantæ, ex quibus "colligitur

" colligitur hepatica & Succotrina, non nisi loco natali. Hepatica colligitur " in China, non in Socotra, Caballina conficitur etiam in omnibus tractibus " Indiæ Orientalis maritimis." *Herm. Cyn.* 689; who calls the plant, which affords all the three, Aloe Asiatica. " Ab eruditiſ. D. Hans Sloane, ex pro- " pria obſervatione, cum in inſula eſſet, certior factus ſum Barbadenſem Aloen, " Aloes vulgaris. *B. P.* ſuccum eſſe." *Dale.* The Barbadoes Aloes is brought over in large gourd ſhells. We never keep the Horſe-Aloes.

The manner of collecting the juice, as related by P. Herman, was communicated to Mr. Ray, by Dr. Palmer; and you have it fully in his H. P. p. 1196. and ſomewhat abridged in *Dale*, p. 249: from whom, without naming the author, *Geoff.* ii. 650. copies it; applying it to the Succotrine, though it reſpects all the three in *R. H.* He alſo gives another way of making the hepatic in both Eaſt and Weſt-Indies, thus, " Folia (Aloes vulgaris. *B. P.*) " minutum ſecta & contuſa, in vas oblongum & cylindriforme reponunt per " dies 25. Spuma attolitur inutilis & abjicienda. Tum ſuperior ſucci pars " ſumitur, a fæcibus ſeparatur, & calore ſolis concreſcit in Aloen hepaticam: " fæces vero inſpiſſatæ impurum præbent extractum, quod caballina Aloes no- " mine donatur. Aloe caballina propriè dicta, odore ſuo ingrato ac vehemente " a cæteris diſtinguitur, licet cum vulgari cæteroquin ſat bene conveniat: " imo nonnunquam adeo lucida & pura præparatur, ut a Succotrina nonniſi " odore tetro diſtingui poſſit." Thus *Geoff.* ii. 651. makes hepatic Aloes an inſpiſſation of all the juices: one ſort of horſe Aloes an impure extract; and another a very pure concreted juice; but tells not whence nor how it is prepared.

I do not find Aloes in Hippocrates, nor in Theophraſtus; but it ſeems to have been famous in Auguſtus's days, if Celſus lived then. " Sed medica- " menta ſtomachum fere lædunt. Ideoque omnibus catharticis Aloe miſcenda " eſt." *Celſ.* l. 2. c. 12. vid. l. 1. c. 3. And *Dioſcorides*, l. 3. c. 25. and *Pliny*, l. 27. c. 4. are long on it, and (as do all the ancients ſince) much commend it. Dioſcorides, after a particular deſcription of the plant, adds, " Plurima in India præpingiſque naſcitur: ex qua etiam coactus ſuccus im- " portatur. Naſcitur & in Arabia, Aſia, ac in locis quibuſdam maritimis & " inſulis. . . . Duo ſunt ſucci genera: alterum arenoſum, quod puriſſimæ veluti " fæx & craſſamentum eſſe videtur: alterum quod ad jecinoris imaginem ver- " git. Eligito pinguem" . . . (then follow the virtues of it interne, externe, among which he obſerves), " ſed & aliis purgantibus medicamentis admiſta, " præſtat ut minus ſtomachum infeſtent" . . . (and concludes) " Lavatur & " Aloe; atque id quod arenoſum ſubſidet, tanquam inutile ſecernitur: pin- " guiſſimum autem, quodque læve eſt recipitur." Pliny has but one Aloes, of which among other things he ſays, " Uſus multus, ſed principalis alvum " ſolvere, cum pene ſola medicamentorum quæ id præſtant confirmet etiam " ſtomachum, adeo non infeſtet ulla vi contraria." l. c.

" Aloe dicta videtur, quia maritimis gaudet. A recentioribus ſemper- " vivum & ſempervivum marinum, quod ſempervivi modo diu duret, appel- " latur: ſedum amarum Columellæ: & quia ejus ſuccus amarus eſt, idcirco " & gentianam, quæ amariſſima eſt, Aloen Gallicam Appleius nominavit." " *B. P.* Caballina Indi utuntur pro incruſtandis navibus picis loco; norunt " nunc eam expurgare a ſordibus, ita ut a Succotrina etiam experientiſſimus " vix contradiſtinguere valeat." *Herman. Cyn.* p. 690.

SECT. II.

Aloes is an acrid, detergent, deobſtruent cathartic; called ſtomachic, uterine, anthelmintic, and vulnerary, and is commended inwardly in weakneſſes, infarctions, and obſtructions of the viſcera, where phlegmatic and viſcid humors prevail, or the bile wants its proper acrimony; and outwardly for foul ulcers, &c. *Magni uſus eſt.*

" Vim præter purgantem obtinet & exiccantem gr. iij. calfacientemque " gr. ij. Proritat hæmorrhoides & menſes, roborat ventriculum, enecat & " expellit lumbricos, arcet putredinem, aſtringit, exterget, adeoque vulneraria eſt inſignis. *Præp.* 1. Aloe depurata ſive lota. N. Aloe conſtat parte " reſinoſa & aquea, illa purgationi inutilis, hæc idonea. 2. Balſamus ſeu " extractum cum ſp. vini. Doſis a ℈j. ad ʒß. 3. Aloe violata. Doſis a ℈ß. " ad ʒß. 4. Aloe violata tartarea. Doſis a ʒß ad ʒj. ℞. Al. viol. p. 11. " Cryſtal. tart. per unam. 5. 6. 7. Aloe roſata. 8. Oleum Aloes purgans." *Schrod.* 779.

1. It has a very bitter and nauſeous taſte, making a laſting impreſſion, and a ſtrong ſmell which I cannot call aromatic. " Eſt tota planta odore " gravi, & guſtu amariſſima." *Dioſcor.* l. c. " Odor ineſt bonus quidem " ſed ſuus; ſapor autem primo guſtatu dulcis, dein ſubamarus." *Meſue Simpl.* l. 1. c. 1. p. 25. " Saporis acris, amariſſimi, nauſeoſi, pinguis, oleoſi, & " adſtringentis; odoris fragrantis ad myrrham accedentis." *Herman.* l. c. " Odore gravi, aromatico; ſapore amaro admodum ac abhorrendo, & mirum " quod manu tantum attrectanti, illius vapore inficiatur aer, atque guttur " amarum reddatur." è *Column. R. H.* 1195. " A Succotrina ſaporem habet " inſigniter amarum adſtringentem, aromaticum, aliquantulum tenuem, & " oris halitum commendantem: odorem autem aromaticum & tamen gravem. " Hepatica odore & ſapore Succotrinam æmulatur, gravius tamen olet, paulo- " que amarior exiſtit, magiſque adſtringit. Caballina guſtu amariſſima, & " valde adſtringens, non ſine horribili qualitate aliqua palatum & ſtomachum " afficiens." *J. B.* iii. 698; who has near four pages on it. " Saporis valde " amari & acris; odoris acris, fere inſtar myrrhæ vel olei ſpicæ. Caballina eſt " fere nullius odoris." *Nucl. Belg.* 14. " Aloe Succotrina aromaticam amari- " tudinem reſipit, odore gravi, aromatico tamen, nec adeo ingrato myrrhæ " proximo. Hepatica eſt odore graviore, ſapore intenſius amaro. Caballina " odore ingrato & vehemente a cæteris diſtinguitur." *Geoff.* ii. 650, &c. The ſmell has ſome reſemblance of myrrh, but a diſagreeable one. Though it does not appear aſtringent to my taſte, yet a ſolution of vitriol and of Aloes mixed become black. Its binding effect ſeems chiefly to depend on its purging. For it is but a weak aſtringent; and the more it purges, the more coſtive is the belly afterward. — 2. It conſiſts of a reſinous and a ſaline part: and I found that water diſſolved as much of the Succot. Aloes as did ſpirit of wine, *viz.* $\frac{7}{8}$ parts. But of the hepatic water diſſolved only $\frac{3}{4}$. Whereas ſpirits of wine took up much more. (α) According to *Mr. Bolduc*, (*Mem. Acad.* an. 1708.) the Succotrine Aloes contains one half part leſs of roſin, and one third part more of gummy parts, than the hepatic. For though both diſſolved compleatly in boiling water, yet ſome parts, when cold, ſubſided: and he had from

Aloes

Aloes Succot. ℥iv. extracti gummoſi ℥ij. ʒj. & extracti reſinoſi (from what ſubſided with ſp. vin.) ʒvj. gr. xxiv: the fæces weighed gr. lx. ſo that there evaporated ʒvij. gr. lx. But from hepatic aloes ℥iv. there were extracti gummoſi ℥j. ʒiij. ext. reſinoſi ℥j. ʒiij. & fæcum ʒivß. ſo that ʒvß. were loſt. But how much ſulphur or roſin is diſſolved in the gummy or aqueous extracts cannot hence be determined. In order to this, they ſhould have been firſt extracted alſo with ſpirit, and the reſiduum with water, in which manner he treated jalap. (β) The gummy part only is cathartic, the roſin purging little or none at all; ſo that the extract with water is ſtronger than the ſubſtance. (γ) The roſin is that on which the balſamic and vulnerary virtues depend, which he found to be very effectual in wounds. Hence it is of a very different nature from the reſina jalapæ & ſimilium. (δ) The Succotrine is more cathartic than the Hepatic, which is a better vulnerary than the Succotrine; conſequently, for internal uſe the Succotrine is to be preferred, and for external the Hepatic. "Inſuper ſalina pars in Hepatica a reſinoſis debite temperatur, non item in "Succotrina. . . Ex quibus ſequitur Hepaticum Succotrinæ anteponendam "eſſe, tum ad uſum externum, tum etiam ad uſum internum. Quod jam "nonnulli, contra vulgi opinionem, tueri ac probare conati ſunt; ut Jubera, "pharmacopœus Hiſpanus, *apud Zacut. Luſitanum*, & alii apud *Roſſincium*, "p. 36. *De purgantibus*." *Geoff.* ii. 653. *P. Herman* ſays alſo, "Hepatica "mihi optima videtur." *Cyn.* p. 690. Though the *London* diſpenſatory has thrown it out altogether, retaining only the Aloe Socotorina, which ſhould be written Zocotrina, according to *Pechlinus de purg.* 141.

That the purgative part of Aloes is gum or mucilage, has been obſerved by many. Vid. *Schrod.* But authors differ as to the nature of its roſin. "Aloes "extractio cum ſpiritu vini peſſima tormina ventris & hæmorrhoides excitare "ſolet." *Martſ. Col. Chym. Leid.* p. 40. "Aloes reſinoſitas præcipuus teneſ-"mi illius hæmorrhoidalis autor eſt." *Ludov. Pharm.* p. 40+20. "Aloes "pars gummea ad alvum ſolicitandum, præ reſinoſa parte longe aptior, ac "teneſmi hæmorrhoidalis reſpectu, cæteris paribus, pene ſecurior eſt." *Idem de vol. ſat. tart.* p. 557. "Etmullerus duas ſubſtantias in Aloe agnoſcit, "mucilaginoſam, ex qua vis purgans pendet; & reſinoſam in qua aſtringens "ſeu fibras roborandi vis latet." *Geoff.* ii. 661. And if the roſin be ſo mild as Meſſ. Bolduc and Geoffroy make it, the Hepatic in moſt caſes is much to be preferred to the Succotrine, and the ſubſtance to the aqueous extract. But will not the extract do as well as the ſubſtance in a ſmaller doſe? Does not the extract loſe by decocting? Experiments are wanting to determine theſe. Vid. *Pemb. Diſp.* p. 170. who, on the ℞ for the gummi & reſina Aloes, remarks: "The intention of this ſeparation of the reſin is to procure in the "gum a medicine leſs purgative, but more agreeable to the ſtomach than "the crude Aloes." But would it not thus become more purgative? Certainly: if this quality is not diminiſhed by long coction. Vid. *N. Diſpenſatory*, p. 73, 74. & 253. where we find—"I have exhibited this reſin, divided by "trituration with the teſtaceous powders, in the doſe of a ſcruple, without "obſerving any effect from it."

3. When it is taken it does not ſoon purge, even ſometimes not the firſt day, although a ſmall quantity of it ſeldom fails to operate at length. "Tarde "purgat Aloe." *Hoffman*, p. 7. § 17. "Vix intra 24 horas abſolvit opera-

" tionem, ut Fallopius obſervat." *Id.* p. 8. § 18. " Verum de una Aloe " mirum eſt, quod in dura melancholicorum alvo, minore in doſi, plus ad- " ferat commodi, quam maxima, & quod ſpem fruſtrante vehementiſſimo " purgante ſolâ ſæpe temperie aperiat felicius." *Peckl. de purg.* p. 141, who reckons it among the ignava & tardigrada purgantia. It is found alſo powerfully to provoke the hæmorrhoids and menſtrua: ſo that its operation does not ſolely depend on its ſtimulus in the primæ viæ. " Partium tenuitate fundit " ſanguinem, & ad vaſorum extrema deducit: earundem craſſitie fit ἀναστο- " μωτικον. De vi illa anaſtomotica ſcripti ſunt integri libri." *Hoffman*, p. 8. " Docet experientia, quod frequens Aloes uſus hæmorrhoidarum venas ape- " riat, quod ego millies obſervavi; & vos ex 100 eorum qui Aloe ad ex- " cernendas fæces utuntur videbis 90 hæmorrhoidarum fluxum pati; omiſſo " vero Aloes uſu, venas illas claudi." *J. B.* iii. 700.

" Tho. Bartholinus, Act. Med. 1673. obſ. 64. exemplum adducit urinæ " cruentæ ex nimio Aloes uſu." Vid. *R. H.*

" Si Aloe detur in majori copia, eo magis poſtea aſtringit, in minori doſi " magis purgat." *Albin. MS.* In a word, Aloes is quaſi bilis ipſa, though leſs ſaponaceous, and ſo may be called hepatic as well as ſtomachic. Hence in bilious and ſanguine conſtitutions and diſeaſes, in pregnancy, and where hæmorrhages are to be feared, Aloes is not to be uſed: but in oppoſite circumſtances it does great ſervice.

" Aloe foris cum felle bubulo, intus autem cum melle vermes necat. Au- " genius non novit præſtantius ad illos remedium, quam ſi pueris detur. Et " credo plus poſſe quam ſementina." *Hoffman*, p. 6. Yet *Redi* found that worms lived many days in moiſt earth mixed with powdered Aloes, after they had been twenty-four hours in a ſtrong ſolution of it in water. " Idem ex- " perimentum, adds he, iteravi, quatuor lumbricis in eandem tincturam im- " miſſis. Poſt tres dies integros nondum mortui erant, ſed ſub finem quarti " diei omnes extinctos inveni. Quo ergo fundamento credi poteſt Aloen tam " potens præſenſque remedium eſſe adverſus lumbricos, ac ſcriptores vulgo " memorant." *Obſ.* p. 158. " Aloe & colocynthis, fermentationem paſſæ, " amarorem amiſiſſe Wedelio obſervantur. *Act. Lipſ.* 1686. p. 366." *Boerh. Chem.* ii. 184. " Aloe eſt pulcherrimum, & innoxium purgans." *Ibidem*, p. 283. Yet it wants not its enemies.

" Analyſi chymica ex Aloes hepaticæ ℔ij. prodierunt humorum ℥xj. ʒvj. " gr. viij; olei ℥j. ʒvij. gr. xlvi. Carbones pendebant ℥xv. ʒij; unde cine- " rum ℥ij. ʒv. gr. xlii, ac inde ſalis fixi ſalſi ʒiij. gr. xxxiii. (ergo terræ ℥ij. " ʒij. gr. ix:) & jactura fuit ℥iij. gr. xvij." *Geoff.* ii. 654; who begins his account of its virtues thus: " Aloe medicamentum fuit ab omni ævo com- " mendatiſſimum, tum ad uſum internum, tum ad externum." . . ; then diſcuſſes the following ſeveral controverſies about it; as, (α) De virtuti ejus purgante (*ſcil.* an inter eccoprotica, an inter cathartica ſit recenſenda.) (β) De virtute roborandi viſcera. (γ) De ejus vi anaſtomotica. (δ) De vulnera & ulcera glutinandi, & ſanguinem ſiſtendi ejus virtute. (ε) De doſi ejus. (ζ) De ea utendi tempore. (η) De ejus lotione, nutritione ſeu inſuccatione, uſtione, &c. all which are eaſily ſolved from what is above ſaid. He has more than ſeventeen pages on Aloes. I cannot but mention his tritum adagium, viz. *Qui vult vivere annos Noe, ſumat pilulas de Aloe.*

It

It is an efficacious medicine, and ſo may be, and has been, abuſed to the prejudice of ſuch as did not want it, as well as by the ignorance of ſuch as did not underſtand the nature of it; of which even Galen is accuſed. " De " Aloe diverſos Galeni libros legenti, videbitur ipſe quibuſdam in locis ſibi " maxime contradicere," ſays *J. B.* For ſometimes he makes it only an eccoprotic; ſometimes a weak cathartic, emptying only the ſtomach and inteſtines; " Etenim (ſays he, *De comp. med. κ. τ.* l. 8.) etſi quandoque, ampliori " pondere exhibita, uſque ad locos circa jecur ſe diffundat, non tamen totius " corporis purgatoria Aloe exiſtit." Whereas at other times he makes it to purge the whole body: " Aloe (inquit l. *De Theriaca ad Piſonem*) atque " etiam æris ſquama . . . . aſſumpta per os univerſum corpus purgant, &c." Vid. *J. B.* iii. 699, &, ſi placet, *C. Hoffman*, p. 4—10.

SECT. III.

It may be given to ʒij; but ʒj need not be exceeded: ʒß is commonly enough. It is uſed in the tinctura myrrhæ & aloes, elixir proprietatis utrumque, tinctura ſacra, elixir ſacrum, pulvis hieræ, pilulæ cocciæ, rufi, exphracticæ utræque, de gambogia, Rudii & ſtomachicæ, balſamum traumaticum, & unguentum vermifugum; *Pharm. Edinb.* 1744. In all which the ſuccotrine is ordered, except in the tinct. myr. & aloes, and B. traumaticum; and that alſo prepared or waſhed, unleſs it be Aloe lucida puriſſima. But who now prepares Aloes for any of theſe?

" Aloe præparata, ſeu lota. Aloe ſolvatur in aquæ fontanæ q. ſ. adhibito " leni calore: colata, rejectis fæcibus, evaporetur in mellis ſpiſſitudinem. " Aloe lucida puriſſima non indiget lotione." *Pharm. Edinb.* 1756. " Ubi- " cunque in pharmacopœia occurrunt hæc medicamenta, hiſce modis præpa- " rata eſſe intelligantur, niſi præſcribantur ſine præparatione." *Ibid.* Aloes is no where ordered unprepared.

It was given to ʒiij by Dioſcorides and Pliny; but among the moderns, (though ſome follow the ancients) ſcarcely any go the length of ʒj. „ Aloe " datur in ſubſtantia ad ʒiij Sennerto & Fernelio; ad ʒij Horſtio & Heurnio; " ad ʒiß Duncano; ad ʒj Curtio." *Paulli*, p. 576. " Doſis ℈j. ʒj. ʒij." *Bates.* " Exhibetur tantum a ℈j. ad ℈ij ſub forma boli vel pilularum: adeo enim " amara eſt & nauſeoſa, ut palatum vix reperiatur, cui Aloe ſoluta poſſit ex- " hiberi." *Geoff.* ii. 660. N. B. Tinct. ſacra.

" Pro ſcopo laxandi & purgandi extrahatur Aloe cum aqua ſimplici, vel " fumariæ, &c. ſale tartari, vel oleo tartari per d. guttis aliquot acuata; quo " mediante mucilaginoſa ſubſtantia laxativa elicitur, relicta reſinoſa inutili, " quæ in aqua non ſolubilis eſt. Tinctura inſpiſſata dat extractum cathartı- " cum in pilulas formandum a gr. iij. ad vj. egregie laxans, vel ad ℈j. fortiter " purgans. Interim non nimis ſalis tartari addatur alias vim purgandi om- " nino deſtruit; cum alcalibus enim in ſufficiente quantitate ſp. vini digeſta " amarorem & vim catharticam inſigniter deponit." *Etmuller*, vol. i. p. 757.

LECTURE LXXV.

BDELLIUM.

SECT. I.

BDellium. *offic.* Bdellium. *B. P.* 503. *J. B.* i. 2, 317. *Park.* 1571. Bdellium offic. *Dale* 349. Bdellium omnium autorum. *R. H.* 1844. Βδέλλιον, Belchon, Malathram, Maldacon, ſeu Madelcon. *Schrod.* 713. Gum Bdellium. —This is a reſinous gum, of a reddiſh-brown colour, like common glue, ſomewhat tough and ſemipelluced, of a warm bitter taſte and pretty fragrant ſmell. It is brought here in lumps of different ſizes.

" Ex Arabia, Media, & India ad nos tranſportatur." *Dale.* " It comes " by the way of Marſeilles, or is imported by the African company." *Savary's Dict.* i. 313. " Bdellium fin comes from Aleppo, to the quantity of forty " or fifty quintals annually; valued at ſixteen or ſeventeen ſols per pound." *Idem.* iii. 431. " Sæpius cum myrrha in ciſtis permiſtum reperitur, & non- " nunquam cum gummi ſenegal." *Geoff.* ii. 624. " Colligitur ex arbore " Americana ſpinoſa." *Herm. Cyn.* 635. " Omne Bdellium ex India." *Hoffman.* 122.

Dale and *R. H. J. B.* &c. deſcribe alſo a blackiſh Bdellium from Guinea, called ſometimes Bdellium adulterinum. *Bauhinus in Matth.* p. 92. has ſix ſorts of Bdellium. " Bdellium is a gum of a reddiſh-brown colour, deeper " than myrrh, and of a tougher and more tenacious conſiſtence, and diffi- " cultly diſſolved in any liquor, coming neareſt to myrrh in ſcent, but not " ſo pleaſant, and of a bitteriſh hot taſte. This comes from Turky and " India, and is by much the beſt. There is another ſort which comes from " Guinea, that is whiter, in large round drops of little ſcent: but this is leſs " eſteemed." *Miller's Bot.* 79.

I do not find Bdellium in Hippocrates, nor in Theophraſtus; but Dioſcorides's deſcription of it agrees not badly with that of the ſhops. Some make the name originally Hebrew, vid. *Patrick's Com. on Gen.* ii. 12. others Greek, " A βδέω videtur eſſe βδέλλα, βδέλλος, βδέλλιον, quod ſanguiſugam notat, " & gummi ſui generis." *Hoffman* 122.

" Bdellium nonnulli Madelcon, alii Bolchon appellant. Lachryma eſt " arboris Saracenicæ. Probatur guſtu amarum, tranſlucidum, taurino glutini " ſimile, pingue intima parte, & facile molleſcens, lignorum ac ſordium ex- " pers, in ſuffitione unguis odorati in modum odoratum. Eſt & alterum " ſordidum & nigrum, glandioribus glebis, in offas convolutum, quod qui- " dem ex India advehitur. Defertur etiam a petra oppido ſiccum reſinoſum, " ſublividum, ſed facultate ſecundum. Adulteratur admixto gummi, &c." *Dioſcor.* l. 1. c. 80. p. 44. " Vicina eſt Bactriana, in qua Bdellium nomina- " tiſſimum. Arbor nigra eſt, magnitudine oleæ, folio roboris, fructu capri- " fici, naturaque, &c. *Plin.* l. 12. c. 9. " Alii arbori myrrhiferæ eam valde " ſimilem faciunt. Et Thevetus affirmat ſe bis mille myrrhæ & bdellii feraces " arbores in eadem ſylva ſimul creſcentes vidiſſe. De ea nihil certi traditur:

" An

" An arbor lacteſcens, aculeata, foliis quernis, Americana, Bdellifera forte; " ſive arbor Bdellium ferens in America. *Pluk. Phyt.* l. 145. *Dale* 349. " Quod Bdellium putatur, quia certo ſcimus, & a Rondeletio experimentis " perſuaſi ſumus, optimè viribus myrrhæ reſpondere, putamus illud myrrhæ " ſpeciem eſſe." *Lob. Adv.* p. 428.

SECT. II.

This agrees with myrrh in virtues; is called diaphoretic, diuretic, cathartic, and uterine, yea and pectoral too; and is commended inwardly in coughs, aſthmas, ulcers of the lungs, gravel, hæmorrhoids, &c. but more proper in cold and phlegmatic than hot diſeaſes; in obſtructions, than in overflowing of the catamenia and hæmorrhoids, &c. and outwardly as anodyne, diſcutient, and maturating, in plaiſters, &c. It has been given to ʒj. But is now little uſed except in the mithridatium, and troch. cypheos pro mithridatio.

" Calfacit & ſiccat (N. aliis calf. 3. ſicc. 2. aliis calf. 2. hum. 1.) digerit, " diſcutit, ſudorem movet. *Uſus præcip.* internus in tuſſi, ac pulmonum apo- " ſtemate, calculo atterendo, urina cienda, menſibus immodice fluentibus, ut " & in fluore uterino ſiſtendo, fœtu expellendo. Extrinſecus diſcutit hernias, " mollit durities ac nervorum nodos, adèoque creberrimi uſus eſt in emplaſtris " ſtipticis. N. Contuſum ſolvitur affuſo vino, aqua calida, aut aceto. *Præp.* " Pilulæ de Bdellio: ex Bdellio & myrobalanis. N. Siſtunt fluxum hæmor- " rhoidum ac menſium." *Schrod.* 713. " Purgat apud Arabas, pituitam doſi " a ʒß. ad ʒij. quamvis Averroës in ʒj. ſtet. In uſu ſunt apud nos pil. de " Bdellio majores Meſue. Videant boni an vera ſit laus earum in cohibendis " menſibus." *Hoffman*, p. 124.

It is pretty bitter, odoriferous, a reſinous gum, and every way much reſembles myrrh. " Sapore ſubamaro eſt, multum tamen a myrrha relinquitur: " odorem non inſuavem ſpirat, flammamque concipit, & quidem pertinacem " licet cum crepitu. . . Exterior facies glebarum, aliquando myrrham vulga- " rem refert, coloris ferruginei, ſed non tam intenſi amaroris." *J. B.* i. 2, 317. " Saporis acris, pinguis, lenti, amaricantis, aromatici; odoris fragrantis." *Herm. Cyn.* 635. " Coloris ex ferrugineo nigricantis, ad myrrham accedentis, " cujus ſaporem & odorem æmulatur." *Dale* 349. " Nobis compertum eſt " crebro uſu, utramvis (Myr. & Bdel.) ciere menſes, mollire, &c." *Lob. Adv.* 429. *Mr. Geoffroy* gives no analyſis of it, but an extraordinary note ſtolen from *Hoffman*, p. 123. § 8. viz. " Inſigniter etiam diſcutit, aperit, atque ab- " ſtergit, ſed alia atque alia ætate: ſi diſcutere velis, mediæ ætatis ſumendum " eſt: ſi abſtergere tantum, quo vetuſtius eo melius." *Geoff.* ii. 625, without naming his author. " De facultatibus ſcribit Galenus (6 Simpl. &c.) haberi " vim emolliendi, & eam quidem potentiorem, dum recens eſt. . . Conſenti- " unt Serap. Avic. Aver. Ex quibus quis ulterius colligerit, etiam inſignitet " diſcutere, aperire, & abſtergere, ſed alia atque alia ætate magis, minus. " Si emollire quis velit tantum, recentiſſimum & pinguiſſimum, quod idem " eſt molliſſimum, aptius erit: ſi diſcutere etiam, aut accipiat mediæ ætatis, " aut recenti addat vetuſtum: ſi diſcutere et abſtergere tantum quo vetuſtius " eo commodius." Thus *Hoffman*. But this is only trifling.

EUPHOR-

EUPHORBIUM.

SECT. I.

Euphorbium. *offic.* Euphorbium. *B. P.* 496, & omnium authorum, is a reſinous gum, in ſmall friable yellowiſh drops, of a moſt acrid cauſtic taſte, and no ſmell; brought from Africa and the Eaſt-Indies; being the proper concreted juice of a plant of the ſame name, ſuppoſed to be the

Schadida calli. *H. Mal.* vol. ii. p. 81. t. 42; Euphorbium verum antiquorum, Schadida calli horti Malabarici. *H. Amſt.* i. p. 23; *R. H.* 873; *B. J.* 259; Euphorbium Indicum, opuntiæ facie, caule geniculato, triangulari. *Breyn. Prod.* ii. 24; *H. Ox.* iii. 345; tithymalus aïzoïdes triangularis, nodoſus & ſpinoſus; lacte turgens acri. *Pluk. Alm.* (390. *H. Cl.?*) 379. *Fl. Mal.* 168; *C. Commel.* prælud. p. 21; T. Indicus ſpinoſus & anguloſus, lacte turgens acri. *H. Beaum.* 41; Euphorbium verum. *I. Commel. in H. Mal.* 2. p. 82; (ſcribunt Boerh. in Indice, & Commel. in prælud. Scadida-calli, non Schadida-calli.) Euphorbia aculeata triangularis, ſubnuda, articulata, ramis patentibus. *H. Cliff.* 196. Euphorbium trigonum ſpinoſum rotundifolium, *Act. Reg. Par.* anno 1720. The Euphorbium plant or tree.

This plant, *C. Commelin.* in Præl. p. 9—17. endeavours to prove to be the ſpecies which yields the Euphorbium off. & antiquorum; as agreeing with what the ancients have left us concerning either this plant or gum; among which juice parts of the plant are ſometimes brought hither. "Addamus deni-"que (ſays he) quod fruſta ipſius Scadida-calli inter Euphorbium patruo è "Barbaria ſunt allata, & quod ipſe Scadida-calli plurimas capſulas ſeminales "inter gummi invenerit." *Prælud.* p. 12. "Jo. Commelinus hanc plantam "veram eſſe Euphorbium ſe exinde ſcire ſcribit, quod ſibi fruſtum hujus cum "gummi ex Barbaria fuerit allatum, & deinde invenerit complures capſulas "ſeminales, flores & fruſta plantæ in ſaccis coriaceis inter Euphorbium." *R. H.* 873. But perhaps the Euphorbium. *Dod.* 378. *B. P.* 387. *Ger.* 1178. *Park.* 227. (Euphorbium vulgò ſed falsò creditum. *R. H.* 872. Euphorbium cerei effigie, caulibus craſſioribus, ſpinis validioribus armatum. *Breyn.* prod. 2. *H. Ox.* iii. 345. *B. J.* 258. Euphorbium cerei effigie. *H. Am.* i. 21. Tithymalus Mauritanicus, aphylos, anguloſus & ſpinoſus, ex quo Euphorbium officinarum. *H. L.* 598. The poiſonous gum, thiſtle-gum, the burning thorny plant called Euphorbium, *Park.*) yields the ſame or a like juice; as do ſome others of the ſame genus.

"I believe the Euphorbium we now uſe is taken from more ſpecies of plants "than one: and I am credibly informed by a very curious gentleman, who "lived many years in the Canaries, that the greateſt part of the Euphorbium "uſed in England came from thence, and is produced from the Euphorbium "tetragonum & pentagonum ſpinoſum Canarinum." *B. J.* (258. *i. e.* Tithymalus aïzoïdes, fruticoſus, Canarienſis, aphyllos, quadrangularis, & quinquangularis; ſpinis geminis, aduncis, atro-nitentibus (atro-virentibus. *B. J.*) armatus. *H. Amſ.* ii. 207. *Com. præl.* 20. Tithymalus quadrangularis ſpinoſus, ſeu ſpinis geminis aduncis, ex eadem ſede ortis, armatus, ſucco lacteo acer-

rimo turgidus. *H. Beaum.* 41.) " And by carefully looking over ſome of this " drug in a ſhop, I found ſeveral ſpines amongſt it, which exactly agreed with " thoſe of that plant." *Miller's Dict.* vol. 1. *Art.* Euphorbium.

" Euphorbium Libyca arbor eſt, fæculæ ſpeciem habens (καρθηκοειδες) quæ " in Atlante Mauritaniæ monte naſcitur, acerrimo referta liquore. . . Eligen- " dum tranſlucens & acre. Difficile autem eſt quod e guſtu petitur ſaporis " experimentum; quippe cum levi linguæ contactu, os accenſum diu deteneat, " adeo ut quicquid deinde exhibetur, Euphorbium eſſe videatur. Cæterum " id, Juba in Libya regnante, primum inventum fuiſſe in confeſſo eſt." *Dioſcor.* l. 3. c. 96. p. 214. " Invenit & patrum noſtrorum ætate rex Juba " quam appellavit Euphorbiam, medici ſui nomine & fratris Muſæ, a quo " D. Anguſtum conſervatum indicavimus. . . Sed Jubæ volumen etiam extat " de ea herba, & clarum præconium. Invenit eam in monte Atlante." *Plin.* l. 25. c. 7. p. 636. " Obſervat tamen Salmaſius, (*Tractatu de Homonymis*) " Ἐυφορβης ἀκανθης mentionem eſſe apud authorem longe Jubâ antiquiorem, " Meleagrum ſc. poetam æqualem Menippi cynici, in quodam poemate Græco " inſcripto στεφανος." *Geoff.* ii. 626. " Adfertur ex Africæ regionibus a mari " remotiſſimis per Selam urbem, vulgo Salé, in Barbariam; unde in Europam " tranſvehitur." *Ibid.*

SECT. II.

It is a violent cathartic and emetic, more dangerous than the ſpurges; called a hydragogue; and is commended in dropſies, quartans, and paralytic caſes; but it is too virulent for inward uſe. Outwardly it inflames and ulcerates, and ſo may do ſervice in errhines, clyſters, ſinapiſms, ointments, &c. in fixed pains, palſies, lethargies, apoplexies, and carious bones.

" Inſignem quidem vim obtinet ſerum ac aquas ex toto corpore purgandi. " Verum enimvero non ſine violentia ac moleſtia, quam præter ſubſtantiæ " proprietatem malignam, vi inflammandi exerit, calidum enim eſt quarto " gradu. Doſis a gr. v. ad x. *Præp.* 1. Correctum Euphorbium (quod fit " quatuor modis). 2. Extractum Euph. paralyſi, arthritidi, ſpaſmo, hydro- " pique conducit; pituitam nervis impactam expurgando ducit. 3. Oleum " ſtillat. 4. Oleum commune. 5. Hiera Logadii; pil. de Euphorbio, & " ſternutatorium Colon." *Schrod.* 780.

1. If taſted it cauſes a moſt violent heat in the mouth and throat, which continues ten or twelve hours; and in the noſe it cauſes troubleſome heat, ſneezing, and ſometimes bleeding; ſo that it muſt be cautiouſly powdered. vid. *Matth.* p. 585. " Saporis eſt acerrimi, exurentis, nauſeoſi, odoris nul- " lius. Vix ſe patitur cicurari, quod quidam tentant ſolvendo in ſp. vitrioli, " aceto, & iterum inſpiſſando; ſubſequente tamen nonnunquam, ubi exhi- " betur, inflammatione ventriculi, & inteſtinorum excoriatione." *Herm. Cyn.* p. 681. " Saporis acerrimi, exurentis, nauſeoſi, odoris nullius." *Dale* 213. *Geoff.* ii. 626. " Saporis eſt acerrimi, ſicut & odoris, præcipue dum teritur, " & inducit ſternutationes violentas, aliquando inflammationes oculorum, & " narium hæmorrhagias; quare dum pulveriſatur ſtrophiolo ſuperne tegunt " mortarium." *Nucl. Belg.* 130. — 2. It melts and flames in the fire; " does

" not

" not diſſolve in water; oils, ſp. terebinthinæ, ſp. vini, diſſolve but a ſmall " portion of it: wine, vinegar, diſſolve not much more; ſp. nitri, ſp. vitrioli, " penetrate it, without ebullition, and ſoften it, but do not diſſolve it; oleum " tartari takes a ſtrong tincture from it." *Lem. Chym.* p. 771. — 3. " Eu- " phorbii electi ℥xxiv diſtilled per retortam gave ſpiritus ſaporis acris ℥iv. " olei nigri fœtidi ℥xiv. The remaining carbo contained an alcaline ſalt. " The Euphorbium in ſubſtance appeared to be more acrid than any of its " ſeparated principles." *Ib.* p. 773. — 4. Neither Dioſcorides nor Galen take any notice of the cathartic quality of Euphorbium; but Pliny (l. 26. c. 8.) does; as do alſo Aëtius, Paulus, and the Arabians. " Græci recentiores " & Arabes inſignem ſerum ex toto corpore trahendi virtutem ipſi tribuunt." *Geoff.* ii. 629. But all make it exceſſively acrid; upon account of which the internal uſe of it is now generally condemned: and ſome are for baniſhing it the *M. M.* as is done at *London*. But certainly it is a powerful attrahent; and ſince not the ancients only, but many famous moderns alſo, as Fallopius, Hildanus, Etmullerus, Wiſeman, Albinus, Heiſter, &c. commend it much in carie oſſium, I think it deſerves to retain its place ſtill." Vid. *Lewis's Ph.* p. 31.

" Analyſi chymica Euphorbii ℔ij. exhibuerunt humorum ℥viiiß. gr. lxvj; " olei ℥xj. ʒij. gr. xviij; carbonis ℥viij. ʒij, unde cinerum ℥ij. ʒiij, ac inde " ſalis fixi alcali ʒij. gr. lviij. (ergo terræ ℥ij. gr. xiv.) et jactura fuit ℥iij. ʒvj. " gr. lx." *Geoff.* ii. 628. This differs not a little from Lemery's analyſis: for, according to this, Euphorbium ℥xxxij ſhould yield only humorum ℥vj, but olei ℥xxj.

How to correct it, ſo as to make it ſafe inwardly, I think a needleſs inquiry: becauſe if its acrimony be removed, its nature is deſtroyed; and where that is not wanted, it ought not to be uſed: and if it is wanted, it is beſt corrected by diminiſhing the doſe, and diluting it well. But the doſe is not well aſcertained. Datur ad ob. iij. ſecundum Plinium, (l. 26. c. 8.) Aëtium, (ſerm. 3. c. 54. p. 127.) Actuarium (l. 5. p. 273. d.); ad gr. x. Sennert. Fern. Heurn; ad gr. viij Horſtio, Geoffroio. " Cum parum tutæ ſint correctiones, cum " Ludovico, Hoffmanno, Wedelio, Timæo, et aliis, ab hoc cathartico abſti- " nendum eſſe cenſemus; vel ſaltem in illis tantummodo affectibus uſurpan- " dum eſſe, in quibus viſcerum membranæ paralyſi affectæ, non niſi valen- " tioribus et irritantibus medicamentis commoveri poſſunt, ut in ſoporoſis " affectionibus, lethargo, apoplexia, paralyſi: tumque a gr. ij. vel iij. ad vj. " vel viij. Serapio et Avicenna obſervant ʒij pondere hauſtum interficere " trium dierum ſpatio, eroſis ab eo inteſtinis et ventriculo." *Geoff.* ii. 629.

GAMBOGIA.

SECT. I.

Gambogia, Gutta gamba, Gummi gutta. *offic.* Succus laxativus ex flavo rufeſcens. *B. P.* 497. Succus undecimus, Ghittajemon appellatus. *Cluſ. Exot.* 82. Ghitta Jemori, Gutta Gamandra, Gumma gotta, Gutta gemau, Catta-

ganma vel Gemu, Gummi Peruanum ſeu de Peru, de Jemou, de Gemandra; aliis Succus Cambici vel Crambici. *Schrod.* 781. Gummi de Goa, Gummi de Peru purgans, Succus Indicus purgans, Scammonium Orientale & Chryſopum. *Mem. Acad.* 1701. p. 172. Cambogium offic. *Dale* 327. Gummi Gutta (cum aliis 20 nominibus) offic. *Geoff.* ii. 679. Cambugio, quibuſdam catharticum aureum. *Park.* 1575. Gamboge—is a hard, clean, gummy roſin, of a deep yellow colour, of little taſte at firſt, (though afterwards it raiſes a heat and dryneſs in the throat) and no ſmell. It is brought from the Eaſt-Indies in round flattiſh cakes, or in rolls; and is ſaid to be the juice of the tree, called Carcapuli, *i. e.*

Carcapuli Acoſtæ. *Cluſ. Exot.* 286. Carcapuli Acoſtæ, fructu malo aureo æmulo, *B. P.* 437. *Pluken Alm.* 81. Arbor Indica quæ Gummi guttæ fundit, fructu acido, ſulcato, mali magnitudine. *Fl. Mal.* 66. Coddam-Pulli, ſeu Ota-Pulli. *H. Mal.* i. 41. t. 24. Carcapuli. *J. B.* i. 105. *Park.* 1635. *R. H.* 1661. The Indian yellow orange of Malabar. *Park.* "Ex ſaucio enim "trunco arboris (Coddam-pulli. *H. Mal.*) manat humor flaveſcens, qui col- "lectus purgatur a fæcibus ſolutione in aqua pluvia, & inſpiſſatione, (ſed "leniſſimo igne, alias nigreſcit) in maſſam uniformem flaveſcentem; ſaporis "primum reſinoſi, hinc acris cauſtici. Transfertur potiſſimum ad nos ex "China, ubi affabrè norunt tractare." *Herm. Cyn.* p. 684.—It is alſo ſaid to be the produce of another ſpecies of Carcapuli, (if that be not a variety only) viz.

"Carcapuli, *Linſchot. Ind.* or *par.* 4. Arbor Indica, Gummi Guttam fun- "dens, fructu dulci rotundo, Ceraſi magnitudine. . . Ghoraka Cingh. *Herm.* "*Muſ. Zeyl.* 26. Binæ hæ arbores ex trunco inciſo Gummi Gutta fundunt, "præſtat autem illud quod ex poſteriori, ut ſentit Hermannus." *Dale* 327. "Altera ſpecies dicitur Carcapulli *Linſchot.* Carcapulli *de Bry.* Kanna-Ghoraka, "*i. e.* Ghoraka dulcis Cingalenſibus, *Hermans in notis ad H. Malab.* Differt "a priore, flore & fructu dulci, rotundo, ceraſi magnitudine, licet in reliquis "conveniat. Binæ illæ arbores, inquit P. Hermans, ex trunco inciſo gummi "Gutta fundunt. Præſtat autem illud, quod ex Kannâ-Ghorakâ; mitius enim "eſt. In Cambaïâ, Chinâ & inſulâ Ceylon creſcunt." *Geoff.* ii. 681.

I ſhall paſs over the various opinions or conjectures of authors as to the original of this drug, (vid. *B. P.* 497, &c.) and only obſerve, that according to Bontius it is got from a plant like the large ſcandent "tithymali ſpecies, "vel eſula Javania; niſi quod non tam alte excreſcat; ita ut ferme ſolo colore "ſucci hi inter ſe differant," and grows in great plenty in Cambodja, a country bordering on China; which De Syen, (and from him Dale, Miller, &c.) makes the common Gamboge. vid. *Bont. Med. Ind.* fol. 28. a "confundi "autem non debet Gummi Gutta hic deſcriptum (inquit *De Syen* in Annot. "ſuis ad *H. Mal.* tom. 1.) cum vulgari, quod ab *Eſulæ Indicæ affini planta* "colligi teſtatur *Jac. Bontius* in Hiſt. Nat. & Med. Indiæ Orient. l. 6. c. 57. "& ab Indis vocari *Lonam Cambodja*, quod in Cambodia, vicina regno (Chinæ) "Indiæ provincia, frequenter proveniat." *Dale* 327. "Verum Bontius ex "aliorum relatione loqui videtur, nec plantam Cambogium fundentem un- "quam vidit; ſiquidem illius ſucci origo ab arboribus duabus Carcapulli nun- "cupatis deducitur." *Geoff.* ii. 680.

If this juice be different from the gummi ad podagram *Monard.* (*Cluſ. Exot.* p. 331.) *Cluſius* is the firſt who mentions it: and he had it an. 1603 from *Peter Garet* of *Amſterdam*, where it had been lately brought from China "cum a "Jacobo Van Neck, claſſis profecto, tum ab aliis qui ipſum comitati fuerant." *Exot.* p. 82. "Adfertur ex Sinarum regione. Videtur eſſe gummi contra "podagram Monardi." *Schrod.* 782. which gum was purgative, and had neither taſte nor ſmell, as Monardes writes; but he mentions not its colour.

SECT. II.

Gamboge is a ſtrong and violent cathartic, and ſometimes emetic; called a hydragogue; and commended chiefly in the dropſy, aſthma, leproſy, and Venereal diſeaſe.

"Expurgat per ſuperiora & inferiora præcipue humores ſeroſos & aquoſos; "tum quoque omnem ſaburram vitioſorum humorum ex toto corpore educit. "Hinc uſus ejus creber eſt in hydrope, febri, ſcabie, pruritu & ſim. Doſis "a gr. v. ad xiv. *Præp.* 1. Ghitta jemu correctum ſp. vitrtoli. 2. Extractum S. magiſterium, cum ſp. vini. 3. Magiſterium S. Cloſſæi. Integrum "tractatum de Gitta Jemou ſcripſit *Jo. Petrus Lottichius.*" *Schrod.* 782.

1. It appears to the taſte almoſt inſipid at firſt; yet afterward it diſcovers its acrimony in the throat. "Initio, ob coloris affinitatem & facultates, aloës "ſuccum eſſe exiſtimabam. propterea aliquantulum deguſtabam; nullam ta"men amaritudinem deprehendebam, ſed poſt temporis momentum, magnam "acrimoniam in gutture mihi excitabat, ut mihi ſuſpicionem moveret euphor"bii ſuccum eſſe poſſe." *Cluſ. Exot.* 82. "Saporis eſt acris nauſeoſi." *Dale* 327. "Saporis eſt primo dulcis, deinde acris." *Nucl. Belg.* 132. "It has "no ſmell, and but little taſte." *Miller's Bot.* 209. "Odoris nullius, ſaporis "fere expers, ſaltem cum in ore detinetur, nullum alium ſaporem primo re"fert, quam gummi Arabicum, ſed paulo poſt in faucibus, levem relinquit "acrimoniam cum quadam ſiccitate." *Geoff.* ii. 679. "It appears at firſt "inſipid on the tongue, but ſoon after becomes ſenſible in the throat by its "acrimony, and an inſupportable dryneſs." *Bolduc, Mem. Acad.* 1701.——

2. Although it eaſily diſſolves with water into a yellowiſh milk, yet it ſoon precipitates; and really is, for the far greateſt part, a roſin or ſulphur: for it melts and flames in the fire; diſſolves within about a ſixth part in ſp. vini, and is then precipitated by water; and is intirely diſſolvable in a ſolution of ſal tartari, except a few terreſtrial fæces. The roſin & reſinous tincture are more violent than the ſubſtance; but the reſiduum is diuretic only. *Bolduc*, l. c. Spiris ſalis ammon. dulcis diſſolves it intirely. *N. Diſpenſ.* p. 132.——

3. It is a violent medicine, and to be uſed cautiouſly, and as a ſtimulus only. "It is a moſt powerful cathartic & emetic hydragogue, which ſhould be uſed "with great precaution, and only after having well corrected its malignity, "and curbed its violence." *Bolduc*, l. c. I ſtill am of his opinion: though others have much commended it, as ſafe as well as efficacious. "Humores "imprimis ſeroſos ac biliciſos tenues per ſuperiora & inferiora evacuat, idque "cito, non diu moram in corpore trahens, & abſque moleſtia aut torminibus. "Hinc ejus uſus creber eſt in hydrope, cachexia, tuſſi, dyſpnoea, aſthmate,

"ictero,

" ictero, catarrho, arthritide, ſcabie; & ejuſmodi morbis. Quidam in illius " uſu timidi primum fuerunt, ejus violentiam reformidantes; ut G. Horſtius, " qui § 9. *Epiſtol.* ab ejus uſu, ne per aliorum dolores experimenta faceret, " abſtinendum eſſe putavit. Idem tamen poſtea, mitius de illo ſentire cœpit. " Alii felicem experti ſucceſſum, larga manu illud exhibere non dubitaverunt, " etiam pueris, ſenibus, prægnantibus & phthiſicis: quos inter Phil. Hech- " ſtetterus, qui intra novennium ad libras plures ægris innumeris præſcripſit. " Revera qui hoc medicamentum caute & opportune adminiſtrare norunt, " illud commodi in eo deprehendunt, quod ſit ſaporis & odoris expers, parva " doſi exhibeatur, intra brevi temporis ſpatium operationem ſuam exerat, & " quod ſuccos viſcidos & tenaces, in quacunque corporis parte ſtagnantes & " adhærentes potentiſſime diſſolvat, eoſque qui in ventriculo ſunt per vomitum " expellat, cæteros vero per inferiora uberrime propellat." *Geoff.* ii. 684. Well aſſerted, but badly proved! However, the ſmallneſs of the doſe, together with the ſtomachi ſubverſio, vomitio et ſuperpurgatio, which it ſometimes cauſes, as he owns, ſufficiently evince that it is cautiouſly to be uſed; and alſo that it acts more by its ſtimulus than any diſſolving quality; eſpecially ſince its operation is ſo ſoon over.

" Analyſi chymica ex Gummi Guttæ ℔ij. prodierunt humorum ʒvij. ʒvj. " gr. xxiv; olei ʒv. ʒvj. gr. lx. Carbo pendebat ʒxj. ʒvj; unde cinerum ʒj. " ʒv. gr. xxiv, ac inde ſalis fixi ſalſi gr. xxiv. (e terræ ʒj. ʒv.) et jactura " fuit ʒviß. gr. lx." *Geoff.* ii. 682. whoſe inferences I think chimerical. N. One pound (or—ʒxvj.) afforded *Mr. Bolduc* gr. xxxvj. of fixed ſalt. Vid. *Mem.* l. c.

SECT. III.

It is very differently doſed in authors. I never uſed it; but think gr. iv. enough at firſt; though the common doſe being to gr. x. pil. de gambogia ℈j contains about gr. iij of Gamboge.

" Doſis a gr. xv. ad xx." *Cluſio*; " ad gr. xij." *Sennerto*; " a gr. v. ad xv." *Horſtio* et *S. Paulli* 588. " Datur a ℈ß. ad ℈j. Poteſt et delicatulis dari, licet " tormina excitet, hoc enim omnibus fere accidit purgantibus." *Herm. Cyn.* 684. " Doſis ab initio fuit gr. vij. vel viij: poſtea ad xv ventum eſt, imo ad " ℈j, quin ʒj. vid. *Freitag.* 2. *Purg.* 42. Com. noſter *in Diſp.* vidit gut ij. " Olei (*ſc.* Ricini) feciſſe ſuperpurgationes." (An?) *Hoffman*, p. 19. " Doſis " ℈ß. ℈j. ʒß. *Ph. Bat.* " Americani, referente Nicolas Monarde, illius gummi " fragmentum, nucis ponticæ magnitudine, ſeu circiter ʒij, in aquei cujuſvis " liquoris ℥ij. per noctem integram macerant, poſtea mane percolant et bibunt. " . . Præſcribitur a gr. ij. v. vel vij. ad xv ad ſummum licet Cluſius doſim ad " gr. xx. extendat. Sæpius Gummi Guttæ exhibui a gr. ij. ad iv. abſque " vomitu. Nonnulli vero ex gr. iv. ventriculi perturbationem paſſi ſunt, ſed " pauci. Eiſdem vero eadem doſis ſi per plures dies reiteretur, poſt primam " aut alteram vicem, ad vomitum non amplius provocat. A gr. iv, ad viij, " vel x, per ſuperiora et inferiora blande atque copioſe et abſque violentia " purgat: nec ea doſi exhibitum correctione eget, ſi præſertim copioſo liquore " diluatur et extendatur. Si ſub forma boli vel pilularum exhibeatur, faci- " lius vomitum excitat, rarius vero cum mercurio dulci conjunctum. . . .

" Quibus autem facilem vomitum natura negavit, et qui ad vomendum ſunt " inſueti, ab eo abſtinere debent." *Geoff.* ii. 685. Is it not then a very rough if not a virulent medicine?

Some correct it by acids, others by fixed ſalts, others by aromatics, all to little purpoſe. For the beſt way to prevent its ill effects is to uſe it as a ſtimulus, in a very ſmall quantity; and order it only to ſuch as need it and can bear it.

GUMMI AMMONIACUM.

SECT. I.

Gummi Ammoniacum. *offic.* Ammoniacum. *B. P.* 494. *J. B.* iii. 2, 54. *R. H.* 1844. Gum Ammoniacum. *Park.* 1544. Ammoniacum. *Matth.* p. 587. Gum Ammoniac.—This is a reſinous gum, brought to us in lumps compoſed of drops, commonly of different colours, (white, yellow, brown) with bits of ſticks, ſtraws, ſeeds, and other impurities mixed with it; of a viſcous, nauſeous, and bitter taſte; and ſtrong ſmell, to me not diſagreeable. At firſt it is white; but turns yellow and then brown by age.

It is brought from Turky, and alſo from the Eaſt-Indies; but what plant affords it is ſtill unknown in Europe. " Ab India orientali & aliunde ad nos " defertur." *Dale* 119. " It is brought to us from Turky and India." *Miller's Bot.* 30. " It comes from Aleppo and Smyrna." *Savary's Dict.* iii. 503. " Ex Alexandria Ægypti affertur." *Geoff.* ii. 602.

" Ammoniacum & hoc ſuccus eſt ferulæ, quæ in Libya juxta Cyrenen " gignitur. Totus cum radice frutex Agaſyllis appellatur. Maxime pro- " batur quod bene coloratum eſt, ligni & calculorum expers, thuris granorum " glebarumve ſimilitudine (λιβανωτιζον τοις χονδροις) ſincerum ac denſum, " nulla ſorde ſpurcatum, caſtoreum odore imitans, & guſtu amarum: hoc " θραυσμα vocatur (*i. e.* fragmentum) &c. " Vid. *Dioſcor.* l. 3. c. 98. " Alterum quod terræ calculorumve eſt particeps, φυραμα, *i. e.* miſtura gig- " nitur vero ſuccus is in Libya, juxta Hammonis templum (κατα 'Αμμωνα), " e ferulacea ſtillans arbore." " Ergo Æthiopiæ ſubjecta Africa Hammoniaci " lachrymam ſtillat in harenis ſuis, inde & nomine etiam ab Hammonis ora- " culo, juxta quod gignitur arbor, quam Metopion vocant, reſinæ modo aut " gummi. Genera ejus duo. Thrauſton, maſculi thuris ſimilitudine, quod " maxime probatur. Alterum pingue & reſinoſum, quod Phyrama appellant. " Adulteratur harenis velut naſcendo apprehenſis. Igitur quam minimis gle- " bis probatur, & quam puriſſimis. Pretium optimi in libras aſſes xl." *Plin.* l. 12. c. 23. Galen alſo, *Simpl.* l. 6. fol. 42. *H.* makes it the ὀπος of a certain ferula, which, by what is ſometimes found in it, *viz.* " ſemen foliaceum " anethino majus, & plantæ fragmenta nervoſa ſed mollia," *J. B.* it ſeems really to be: and no more we know of it, although it was in uſe in Hippocrates's time. vid. *L. de M. Mul.* l. 2. p. 670. l. 27. if ours be the ſame with the Ammoniacum antiquorum, as probably it is, though ſome think it is not. vid. *J. B.* iii. 2, 54. " Planta vero naſcitur in ea Africæ parte quæ Ægypto " ad occaſum adjacet, quæque hodie dicitur *Regnum de Barca*, in quo fuit olim " templum celeberrimum Jovi Ammoni dicatum, unde gummi nomen." *Geoff.*

Geoff. ii. 603. for which he has only the authority of the ancients, ſo far as I can find; Cairoan, anciently Cyrene, ſtanding in that country.

" Eſt ſubſtantia gummoſa & reſinoſa, ex variis denſis ſolidiſque grumis " modo flaveſcentibus modo lacteis, qui optimi, collectis ex ferula ammonia- " cifera, quæ mole fere arborem æquat & lacteſcens eſt, ſplendidis & nitidis " in glebam coactis, dum manibus tractantur lentore molleſcentibus; ſaporis " acris, amaricantis, viſcoſi, lenti & paululum nauſeoſi; odoris fragrantis, gra- " vis, alliaris fere, aut caſtoreum utcunque æmulantis." *Herm. Cyn.* 630.

SECT. II.

This is emollient, attenuant, and laxative, or gently cathartic; called pectoral and ſplenic; and commended inwardly in coughs, aſthmas, phlegmatic ſtuffings of the lungs, obſtructions of the hypochondriac viſcera, ſpleen, vapours, &c. and outwardly for hard tumors, pains, &c.

" Calfacit 2. ſiccat 1. emollit, attenuat, reſolvit, digerit, maturat, attrahit " valide, ut quoque ſpinas carni infixas eliciat. *Uſus præcipuus* eſt in doloribus " arthritidis, in reſolvenda mucilagine tartarea, viſcoſa, craſſa ac contumaci " pulmonum, meſenterii, & hinc in obſtructionibus contumacibus, lienis, epa- " tis, uteri, & in calculo. Extrinſecus in ſcirrhis, panis, tophiſque juncturarum, in ſcrophulis, aliiſque tumoribus durioribus reſolvendis, &c. Doſis " a ℈j. ad ʒj. *Præp.* 1. Ammoniacum depuratum. 2. Oleum ſtillatitium. 3. Oleum cæruleum S. Cloſſæi. 4. Pilulæ de Ammoniaco. 5. Extractum " reſinoſum. 6. Extractum viſcoſum." *Schrod.* p. 709.

1. It is viſcid, nauſeous, bitter, and ſtrongly odoriferous; melts and flames in the fire, but ſparkles and crackles; and diſſolves in aqueous fluids, as well as in ſpirits. Water, wine and vinegar turn it to milk. . . . " Sapore eſt amaricante, odore galbani viroſiore. Sub dentibus facile deducitur, ſibi cohærens, magiſque albeſcit. Carbonibus injectum in flammam exardet." *J. B.* vid *Herman*, § 1.

" Odoris eſt nauſeoſi, ſaporis amari, acris, ingrati; accenſum claram dat " flammam, in calore facile molleſcit; rumpitur in minutiſſimas partes dum " piſtillo tunditur et in aqua prompte diſſolvitur et fit lac." *Nucl. Belg.* 126. " Sapore primum dulci, poſtea amaricante; odore fragranti, ad galbanum " accedente, ſed viroſiore." *Geoff.* ii. 602. — 2. Ammoniaci ʒxvj diſtilled per retortam gave phlegm. ʒvj; ſpir. acris ʒiij. ʒvij; olei nigri fœtidi ʒvj. Carbonis fuere ʒiv. ʒvj. (ſo that ʒv. were evaporated). The ſpirit did not effervеſce either with ſp. vitrioli, or ol. tartari, but reddened a tincture of turnſole, and alſo muddied a ſolution of ſublimate. Vid. *Lem. Chem.* 768.

" Analyſi chymica ex Ammon. ℔ij. diſtillaverunt phlegmatis (ſubacidi ʒvj. " ʒj. gr. xxxiv. phl. urinoſi ʒj. ʒvj.=) ʒvij. ʒvij. gr. xxxiv; olei ʒix. ʒvij. " gr. xlviij. Carbo erat ʒviij. ʒvij; unde cinerum ʒj. gr. xij, ac inde ſalis " fixi gr. lxj. (e terræ ʒvij. gr. xxiij.) & jactura fuit ʒv. ʒij." *Geoff.* ii. 603. How vaſtly different from Mr. Lemery's analyſis! Is either right? — 3. Externally applied it warms and comforts the parts, eaſes pains, and diſcuſſes or ſuppurates, according to the nature of the tumor; ſo that it is neither ſafe in the gout nor in malignant ſcirrhi. In general its virtues depend on its ſtimu-

lus

lus and lubricating viſcidity, probably more than on any diſſolvent quality in it, for it cannot be called ſaponaceous, though antiſeptic and antacrid it may be. " Ammoniacum partes duras emollit, humores craſſos incidit, lentos ac " tenaces reſolvit," (may not it be ſaid more properly tenues & acres incraſſat, involvit?) " collectos diſcutit. Aſthmaticis prodeſt, cruda pulmonum tuber- " cula diſſipat, hepatis, meſenterii, lienis & uteri ſcirrhos reſolvit, menſes " ſuppreſſos promovet, obſtructiones aperit, articulorum tophos diſcutit, & " alvum nonnunquam ſubducit." *Geoff.* ii. 603. A wonderful medicine indeed, if we believe Geoffroy!

SECT. III.

It is given to ʒj. in any form. Straining is not always neceſſary, and perhaps ſometimes prejudicial. It is an ingredient in our oxymel pectorale, pil. euphracticæ, pil. ecph. chalybeatæ, pil. gummoſæ, mercuriales, laxantes, pectorales, ſcilliticæ, & ſtomachicæ; empl. de cicuta cum ammoniaco, E. diachylon cum gummi, E. mercuriale; cataplaſma diſcutiens: and a chymical oil is drawn from it. A ſolution of it is much uſed as a pectoral.

" Ejus ſubſtantia intus exhibetur a ϑß. ad ʒj. ſub forma emulſionis, elec- " tuarii, boli, vel pilularum. Extrinſecus in ſcirrhis, tophis, ſcrophulis & " tumoribus durioribus aut contumacibus reſolvendis adhibetur. ℞. Gum. " Amm. electi ʒß. Diſſolve in mortario cum aq. hyſſopi ℥iv. & vini albi ℥ij. " Colatura ſit pro duabus doſibus in aſthmate." *Geoff.* ii. 604. " Si glebæ " ſordibus inquinatæ fuerint, ab illis purgantur, ſolvendo in aceto, percolando " & inſpiſſando: ſed hæc præparatio multum de partibus ejus tenuibus & vo- " latilibus aufert. *Ibid.* p. 603. vid. *Lemery Chym.* p. 767. " The ſtrained " gum of the ſhops is a grievous abuſe, being a compoſition of ingredients " much inferior in virtue and price." *Lewis's Pharm.* p. 7. " Ammoniacum " præparatum ſolvatur in aceto, aut aqua, coletur, & leni calore fiat evapo- " ratio." *Ph. Edinb.* 1744. in which *aut aqua* was added to the former receipt. " Ammoniacum diſſolvitur optime in ſpirituoſis & oleoſis." *Nucl. Belg.* 126. ℞. Ammon. electi ʒß, aqua hyſſopi ℥iv. F. emulſio. Add. p. r. n. oxymel ſcillit. ʒß. Capiatur cochl. j. ſæpius in aſthmate ab infarctu pulmonum phlegmatico. Vid. *Gum. Ammoniaci purificatio. Ph. Lond.* p. 26. The Lac Ammoniaci of this Pharmacopœia is G. Amm. ʒij, diſſolved in aqua pulegii ℔ß.

G. ASSA FOETIDA.

SECT. I.

Aſſa fœtida. *offic.* Aſa fœtida. *B. P.* 499. *R. H.* 1843. Aſſa fœtida. *Park.* 1569. Aſa fœtida noſtras officinarum. *J. B.* iii. 2, 133. Alticht ſive Antit Arabibus; Imgu aut Imgara Indis. *Garz. Cluſ. Exot.* 152. Altiht ſeu Aſa fœtida, Javanis & Malaus Hin dicta. *Bont. in Garz.* fol. 3. A Scorderáſarum, ἀσα φιτιδα Italicè dictum. *Nicol. Myr. Antidot.* c. 27. p. 365. D. Hingiſeh aut Hiing. *Kæmpf. Amæn. exot. Faſc.* 3. *obſ.* 5. p. 535. Aſa fœtida.—

This is a reſinous gum (or gum roſin) brought from Perſia, by Turky, or the Eaſt-Indies, in lumps compoſed of drops of different colours commonly, as whitiſh, pale, brown, though all at firſt white: it is pretty free from droſs, and of an acrid, bitter, diſagreeable taſte, and ſtrong garlic ſmell.

Notwithſtanding ſome famous travellers, as Bontius, *l. c.* Mandelſlo, *Harris's Col.* ii. 127. Garzias, *l. c.* &c. have ſaid not a little on this ſubject, yet we knew little or nothing of the Aſa fœtida plant, till *Engelbertus Kæmpferus* favoured the world with a particular deſcription of it, with an account how, and where, the juice is collected, in his *Amœn. Exot. politico-phyſico-medicarum Faſciculi v. Lemgoviæ* 1712. in 4to. He calls the plant umbellifera leviſtico affinis, foliis inſtar pæoniæ ramoſis; caule pleno, maximo; ſemine foliaceo, nudo, ſolitario, brancæ urſinæ vel paſtinacæ ſimili; radice Aſam fœtidam fundente. *Amœn. Exot.* p. 535: and ſays it grows only in Perſia, where it is called, as well as the gum, *Hingeſeh*, and in India *Hiing*; but adds, "Uſitatius tamen eſt vocabulo Hingeſeh plantam Hiing lachrymam exprimere ipſam;" that it flows from the wounded root only, is at firſt of the colour and conſiſtence of cream, (but turns browniſh and viſcid in the air) and incomparably more vehemently fetid, while recent, than any that comes to Europe. "Affirmare auſim drachmam unam, recens effuſam, majorem ſpargere fœtorem quam 100 libras vetuſtioris, quem ſiccum venundant aromatarii noſtrates. Cheraſanenſis ut plurimum pinguior & mollior, pellibus caprinis & ovinis involuta; larenſis aridior, ſaccis ex foliis ſylveſtris palmæ textis tranſmittitur." Vid. p. 535—552: whence *Mr. Geoffroy* tranſcribes eight of his pages on this article, *viz.* 611 ad 619. tom. 2. N. B. It is Hingiſeh, not Hingiſch, as *Dale*, *Miller*, and *Douglas* write it.

Many are of opinion that the Aſa fœtida is the ὀπος, or ὀπος σιλφιε of the ancients; and others poſitively deny it. Vid. *J. B.* iii. 2, 129—136. for the the arguments of authors on both ſides; and *Bod. in Theoph.* p. 591—599, who declares expreſsly againſt it; whom *Mr. R.* ſeems to join with. Yet *Mr. Geoffroy* is very clear that the "ſilphium, laſer, & ſuccus Cyrenaicus veterum & fœtidam Aſſam officinarum non ſunt ſucci diverſi generis, & inter eos perparum interſit diſcriminis." Vid. *M. M* ii. 606. ad 610. For my part I ſhall not pretend to determine the controverſy. Neither can I ſay that the ἀσα φιτιδα, or ἀσα φετιδα Myrepſi, is the Aſa fœtida off. eſpecially ſince the learned Fuchſius makes it the ſcordium off. conſentiente Bodæo in Theoph. p. 791. I mention him only becauſe he is the oldeſt author in which I have found this name.

SECT. II.

It is more acrid and diaphoretic than ammoniac; called cephalic, nervine, and uterine: and is commended internally in palſies, convulſions, lethargies, hyſteric and hypochondriac diſorders, female obſtructions, and all cold, flatulent, and phlegmatic diſeaſes; and externally for ſwellings, cramps, pains, &c.

"Calfacit 3. incidit, &c. *Uſus* internus præcipuus in ſuffocatione uteri, peripneumonia, ac vulneribus; alias raro adhibetur. Extrinſecus in tumido liene, uteri ſuffocatione, panaritio (cum allio ovi albumine ſuſcepto). Doſis a ℈j. ad ʒß. N. 1. Solvitur ſuper prunis coquendo in aqua, aceto, aut vino.

" vino. N. 2. Si quis epilepſiæ obnoxius ſenſerit ſuffitum ex Aſa fœtida ac " cornu caprino paroxyſmo actutum corripitur. *Præpar.* pil. de Aſa fœtida, " & pil. fœtidæ." *Schrod.* 711.

1. It is very biting, hot, and bitter; and ſmells ſtrong of garlic. " Odo- " rem nobis viroſum, allii fere, vehementiorem, magiſque abominandum, " late ſpirans, & nares acriter feriens; ſapore primum amaro, poſtmodum " mordaci; admota igni flaveſcens." *J. B.* " Saporis eſt acris, mordacis, " lenti, aliquantum nauſeoſi; odoris fragrantis gravis, allium mentientis." *Herm. Cyn.* p. 636. Saporis acris & nauſeoſi; odoris gravis, allium redolen- " tis." *Dale* 114. " Saporis valde acris, nauſeoſi, viſcoſi, & alliacei, ſicut " & odoris fœtidiſſimi, diu durantis." *Nucl. Belg.* 128. " Odore viroſo, ad " allium accedente, ſed vehementiore; ſapore amaro, acri, mordace." *Geoff.* ii. 606. — 2. It is juſt ſuch a ſubſtance as G. ammon. conſiſting of reſinous as well as gummy parts, eaſily ſoftening, and diſſolving the ſame way. " Analyſi chymica ex Aſſæ fœtidæ electæ ℔ij. prodierunt phlegmatis (ſc. " acidi ℥v. ʒiij, tum acidi, tum urinoſi ℥j. ʒvij.=) ℥vij. ʒij; olei ℥xiij. ʒvij. " gr. lx. Carbonis fuere ℥ix. ʒij; unde cinerum ℥ij. ʒivß. ac inde ſalis fixi " ſalſi gr. xij. (E. terræ ℥iiß. gr. xxiv.) & jactura fuit ℥iiß. gr. xij." *Geoff.* ii. 619. But here is an ounce too much. — 3. The ſmell of it is commended in hyſteric fits, though it is ſaid by *Schroder* to bring on epileptic: and it is a common ingredient in hyſteric plaiſters. " It is of great ſervice in epilepſies " and convulſion fits of all kinds." *Miller's Bot.* 56. " Ammoniaco & gal- " bano potentior eſt, & ſpecifica in colica & hyſterica paſſione; ſudorifera eſt " in variolis & morbillis, febribus malignis. Odor naribus exceptus hyſteri- " cam paſſionem ſiſtit. ℞. Aſſæ fœtidæ ℈j, ſal. ſuccini gr. xv, boracis ℈ß. " F. cum elix. prop. pilulæ: quarum *uſus* in menſibus, lochiis, & fœtu pel- " lendis." *Herm. Cyn.* p. 637. " Nervorum quoque affectionibus, ſicut & " paralyſi medetur." *Geoff.* ii. 621.

SECT. III.

It is given to ʒj: but ʒß. is commonly enough. It is uſed in the tinctura fuliginis, troc. de myrrh. pil. fœtidæ, pil. gummoſæ, & empl. antihyſtericum. The tinctura fœtida Ph. Lond. is a ſimple tincture of this gum, *viz.* Aſæ fœt. ℥iv. for ſp. ℔ij.

" Præſcribitur a gr. xii. ad ʒj. vel etiam ad ʒij uſque (*vid.* Ammon.). In " aſthmate cum ovo ſorbili ſumpta commendatur, et tanquam efficaciſſima " prædicatur contra vim opii & cæterorum narcoticorum: externe admota, " potenter emollit et reſolvit, unde ad lienis tumores commendatur." *Geoff.* ii. 621.

G. GALBANUM.

SECT. I.

Galbanum. *offic.* Galbanum. *B. P.* 494. *J. B.* iii. 2, 52. *Park.* 1544. *R. H.* 421. *Dale* 118. Galbanum—is a reſinous gum, of a yellowiſh colour,

(though by age browniſh) with intermixed whitiſh or greeniſh drops; of a warm, bitteriſh taſte; and ſtrong, and, to ſome, unpleaſant ſmell. It is brought from Turky, (generally very dirty) and ſuppoſed by ſome to be the juice of a ferula, called ferula galbanifera. *Lob. Ic.* 779. *T.* 321. Ferulago. *Dod.* 721. *Ger.* 1056. Ferulago latiore folio. *B. P.* 148. Galbanifera Ferula. *Lob. Obſ.* 451. *J. B.* iii. 2, 52. Ferula latiore folio. *Park.* 875. *H. Ox.* iii. 309. t. 15. Ferula foliolis pinnatifidis, pinnis linearibus, planis, trifidis. *H. Cliff.* p. 95. the broader leaved Fennel-giant. "Oritur in hortis noſtris hæc pervenuſta "planta, ſemine copioſo, lato, foliaceo, aromatico, reperto Anverpiæ in "Galbani lachryma. Tota facie Ferulam refert, &c." *Lob. Obſ.* 451. "Ferula galbanifera, *Lob.* Galbanum non profert, ut Cl. Tournefort obſerva-"vit, ſed aliud gummi genus intenſe rubens, nec vehementer olens." *Geoff.* ii. 632. But by others it is thought to come from the

Oreoſellinum Africanum galbaniferum fruteſcens aniſi folio. *T.* 319. Ferula Africana galbanifera, liguſtici foliis & facie. *Par. Bat.* 163. *R. H.* iii. 252. Aniſum Africanum fruteſcens, folio & caule rore cœruleo tinctis. *Pluk. Phyt.* 12. Aniſum, fruticoſum Africanum galbaniferum. *H. Ox.* iii. 297. Oreoſelinum aniſoides arboreſcens, liguſtici foliis & facie, flore luteo, Capitis bonæ ſpei. *Breyn. prod.* ii. 79. The Gabanum plant. *Dale* 118. "Revera ſponte "vel vulnere fluit ex ferulacea ſeu umbellifera quadam planta quæ dicitur "Oreoſelinum Afric. Galbaniferum, fruteſcens, aniſi folio. *T.* . . In diverſis "Africæ regionibus, Mauritania præſertim, naſcitur, & in Perſia." *Geoff.* ii. 631. But I do not think this ſufficiently certain as yet. "Genuina illa planta "quæ Galbanum off. fundit, noſtri ſeculi botanicis nondum innotuit. Feru-"laceam eſſe veteres docent omnes, quænam vero ſpecies ſit, non conſtat. . . "Si Lobeliana planta ſit Ferulago latiore folio. *B. P.* certum eſt eam ſuccum "Galbano ſimilem, haudquaquam fundere, licet odor ejus Galbano valde "ſimilis deprehendatur. Incertum autem eſt, an Ferula quam nunc exhibe-"mus, legitima illa ſit è qua Galbanum off. emanat, ut ex candicis geniculis "aliquando lacrymam collegerimus Galbano ſimillimam. . . Plures enim ex-"tare poſſunt ſtirpes quæ ſuccum Galbano ſimilem ſtillant, ut de variis la-"chrymis quæ inter ſe conveniunt, & e diverſis ſtirpibus leguntur, nobis "compertum eſt." Thus *Herm. Par. Bat.* 163. candidly: and in fact we find another plant yet, which is ſaid to yield Galbanum, *viz.*

"Ferula Africana Galbanifera fruteſcens, myrrhidis folio. *H. Amſtel.* ii. p. 115. Another Galbanum-plant." *Dale* 118. Ferula Africana galbanifera, folio myrrhidis. *H. A.* ii. 115. *B. J.* 65. in which index all the forenamed three plants are marked as officinales. The Galbanum however of the ancients "and of the ſhops ſeems to be the ſame.

"Galbanum (χαλβανη) liquor (ὀπος) eſt naſcentis in Syria Ferulæ; id non-"nulli μετωπιον vocant. Probatiſſimum eſt quod thuris præbet effigiem, "grumoſum purum, pingue, minime lignoſum, at nonnihil retinens admixti "ſeminis, ac ipſius quoque Ferulæ; odore gravi, neque valde humidum, "neque etiam penitus aridum. Admixtus reſina, faba freſa, & ammoniaco "adulteratur." *Dioſc.* l. 3. c. 97.

"That which comes from Turky is the beſt; the Eaſt-India ſort is darker "coloured, dryer, and fuller of droſs and ſtalks." *Miller's Bot.* 207. "It "comes from Smyrna and Aleppo." *Savary's Dict.* iii. 499.

SECT. II.

It has all the virtues of ammoniac, but is rather more ſtimulating; and is uſed the ſame way, but wants ſtraining more. It is an ingredient in the mithridatium, theriaca, pil. gummoſæ, trochiſci de myrrha, empl. anodynum, empl. antihyſtericum, empl. diachylon cum gummi, empl. Oxycroceum, & cataplaſma ſuppurans: and a chemical oil has been ordered to be drawn from it. The doſe in ſubſtance is ad ʒj.

" Calfacit, ſiccat 2. complete, emollit, reſolvit, extrahit. *Uſus præcip.* intrinſecus in menſibus ac partu pellendis, in tuſſi inveterata ac aſthmate; adverſatur toxicis. Extrinſecus prodeſt in partu ac menſibus, ſuffocatione uteri, vertigine, in furunculis, ac lentiginibus: quin & glandi impoſitum emplaſtri vice urinam provocare dicitur. *Præpar.* 1. Galbanum depuratum. Solvitur in quolibet liquore aqueo, aceto, ſucco, vino: exprimitur & inſpiſſatur. 2. Oleum ſtillat. *Com.* & *Sam. Cloſſ.* 3. Galbanetum balſamum, ſeu ſp. terebinthinæ galbanetus. 4. Ceratum de galbano, ſeu matricale." *Schrod.* p. 722.

1. It is ſomewhat acrid and bitter, and ſmells ſtrongly, and generally diſagreeably; and though leſs nauſeous and not ſo cathartic as the ammoniac, yet it ſeems more briſkly to ſtimulate the nerves; and hence it is in all the great antidotes, as they are called, as alexipharmic and diaphoretic. " Sapore eſt amaricante cum acrimonia; odore vehementi, & cum gravitate quadam viroſo." *J. B.* " Saporis ſubacris, ſubamari, nauſeoſi, odoris fragrantis, gravis; odor & ſapor idem qui ammoniaci, mitior tamen, tantumque gradu differunt. Virtute nonnihil inferior eſt ammoniaco, ſed in ſpecie valet in colica hyſterica & affectibus convulſivis. Datur ut ammoniacum." *Herm. Cyn.* p. 633. " Sapore amaricante cum acrimonia, odore gravi." *Dale* 118. " Sapore amaricante acri, odore vehementi, cum gravitate quadam virosâ." *Geoff.* ii. 631; " of a ſtrong, piercing, and to moſt an unpleaſant ſmell; of a bitteriſh warm taſte." *Mill. Bot.* 207. — 2. It is a reſinous gum, of much the ſame conſiſtence with ammoniac, and probably the juice of a ſpecies of the ſame genus. And—3. The ſame virtues are generally attributed to both. For Galbanum is commended in coughs, aſthmas, colics, female obſtructions, hard labour, hyſteric fits, &c. vid. *Geoff.* ii. 633. " Eſt inflammabile, totum tamen non deflagrans; ſaporis acrioris, & penetrantioris quam ammoniacum; odoris fœtidi & gravis: expurgat viſcida, eſt bechicum & aperiens fere inſtar ammoniaci, dicitur etiam diaphoreticum, diureticum, anthelminthicum et carminativum; eſt tam validum emmenagogum ut fœtum mortuum expellat: valet ad morbos convulſivos, tuſſim, aſthma, colicam hyſtericam, et hypochondriacam paſſionem, etiam abdomini applicatum: ejus odor epilepticos & hyſtericas excitat. Externe emollit, reſolvit, digerit, detergit, et ad ſuppurationem perducit, fere ut ammoniacum: vim habet magis nervinam et anodynam; valet ad dolores artuum, præcipue rheumatiſmum et arthritidem, ad contracturas et paralyſim. Datur in ſubſtantia ad ʒß." *Nucl. Belg.* p. 131. " Qui diluto manus unxerit, impune tractabit ſerpentes; ſi veteribus fides." *R. H.* 421.

" Diſce & odoratam ſtabulis accendere cedrum,
" Galbaneoque agitare graves nidore chelydros. *Virg. Georg.* l. 3. v. 414.

" Analyſi

" Analyſi chymica ex Galbani electi ℔ij prodierunt phlegmatis, &c. ℥vij. " ʒvj. gr. lxx; olei ℥xivß. gr. xxx. Carbonis fuerunt ℥vij. ʒiß; unde cine- " rum ʒv. gr. xlviij. ac inde ſalis fixi non merè alcalini gr. xij. (E. terræ ʒv. " gr. xxxv.) & jactura fuit ʒiiß." *Geoff.* ii. 632. " Oleum per iteratas " diſtillationes purgatum color cœruleo elegantiſſimo tinctum apparuit. Gal- " banum conſtat ſale tartareo & oleo craſſo fœtido." *Ibidem.* " Præparatur " Galbanum ut gum. ammoniacum." *Ph. Edinb.*

G. OPOPANAX.

SECT. I.

Opopanax. *offic.* Opopanax. *B. P.* 494. *J. B.* iii. 2, 155. *Park.* 1544. *R. H.* 410. Opoponax.—This is a reſinous gum, of a browniſh or reddiſh-yellow colour on the outſide, ſomewhat paler within, and ſometimes variegated; of a warm bitteriſh taſte, and fragrant ſmell; brought from Turky in irregular lumps, ſeldom in round drops or tears. It is the proper juice of the

Panax Herculeum. *offic. Dale* 115. Paſtinaca ſylveſtris altiſſima. *T.* 319. Panax, Paſtinacæ folio (an Syriacum Theophraſti?) *B. P.* 156. Panax coſtinum. *B. P.* 156. Sphondylio, vel potius Paſtinacæ Germanicæ affinis Panax, ſive Pſeudocoſtus, flore luteo. *J. B.* iii. 2, 156. Panaces peregrinum. *Dod.* 309. Panax Heracleum majus. *Ger.* 1003. P. Heracleum alterum, ſive peregrinum Dodonæi. *Park.* 948. P. Herculeum majus. Ger. *R. H.* 410. P. Heracleum. Ger. *H. Ox.* iii. 315. Paſtinaca foliis decompoſito-pinnatis. *H. Cliff.* 105. Hercules's All-heal.

It grows in Provence, Italy, Sicily, &c. " Ex hujus vulnerato præſertim " circa radicem, caule, ſuccus æſtivis menſibus manat, ſponte concreſcens, " Opopanaci colore ſimilis; odoris quidem exigui, ſed guſtu excalfaciens. " Non modo aut in Italiæ, aut aliarum calidarum regionum hortis, ubi quan- " doque ſeritur, ſuccus e vulnerato caule exit; verum & in Belgio obſervatum " eſt, æſtate fervida hujuſcemodi quoque lachrymam inciſo ſcapo effluxiſſe. " Atque hic quidem ſuccus Panaces genus hanc ſtirpem eſſe evidenter oſtendit: " quod & ſemen confirmat in Panacis lachryma repertum, ex quo Petro Cau- " denbergio, Pharmacopœo Antuerpienſi hæc primum in Belgio enata ſtirps " eſt." *Dod.* 309. " Idem confirmat Paulus Boccone, his verbis, e caule " hujus plantæ inciſo extillat gummi . . . quod genuinum antiquorum Opo- " panax cenſendum eſt, &c." *R. H.* 411. With regard to theſe plants growing here, I venture to ſay, that, if their juice be not the Opopanax, it is very like it. " Adfertur ex Oriente; ſed ignoramus plane ex qua planta exſudet. " Græcis notus fuit. Ex Panace Heracleo dicto extrahitur inquit Galenus, " radicibus & caulibus ipſius inciſis. Quinam vero ſit ille Panax Heracleus " incertum eſt apud authores." *Geoff.* 642. " Plerique conſentiunt in Pana- " ces Herculeum, id, inquam quod primum eſt in ordine apud Bauhinum. " Hoc in ſtatione ſua firmant. 1. Quod non in Italia tantum, ſed & Germa- " nia . . . ſuccum fundit Opopanaci quadantenus ſimilem, colore, odore, ſa- " pore. Quin ipſa planta digitis trita, manifeſte prodit Opopanacem uſualem. " 2. Quod in Opopanacis grumis reperta ſemina, in Belgio ſata, hanc plan-

" tam produxerint. Quem officinæ oſtentant, videtur legitimus Dioſc. eſſe." *Hoffman*, p. 46. Vid. *Dioſcor.* l. 3. c. 55. p. 196.

" Opopanax comes to Marſeilles from the Eaſt-Indies, by Aleppo, Smyrna, " and Holland, from three to four quintals annually." *Savary's Dict.* iii. 535.

" This is a gum which is brought from Turky." *Miller's Bot.* p. 321. " Affertur ex Oriente." *Geoff.* l. c.

SECT. II.

It is emollient, attenuant, diaphoretic, and carminative; called purgative, cephalic, pectoral; and commended inwardly in all cold, phlegmatic and flatulent diſeaſes, eſpecially of the uterus and urinary paſſages; and outwardly as diſcutient for ſcrophulous and other hard tumors. It agrees in virtues with leviſticum, more than with galbanum.

" Calfacit tertiò, ſiccat 2. emollit, digerit, flatus diſcutit, purgat pituitam " craſſam & lentam a partibus remotis, cerebro, nervis, ſenſoriis, juncturis, " thorace; uvulæ delapſæ opitulatur (ſuffitu in os immiſſo). *Præp.* Opopa- " nax depuratus." *Schrod.* p. 734. " Mundificat cerebrum, nervos, pectus; " tuſſi antiquæ confert: potum cum aceto hora una ante acceſſionem febrilem, " arcet rigorem, maxime ſi idem, cum ſucco apii ac oleo anethino, ſpinæ illi- " natur. Doſis a ʒß ad ʒj. Corrigitur ſpica & maſtiche. *Præp.* 1. Opop. " depuratus: fit cum aceto. 2. Extractum. 3. Pilulæ. 4. Oleum ſtillati- " tium." *Schrod.* p. 784.

1. It is neither very hot nor very bitter, but diſagreeable, taſting much like lovage. " Sapore eſt amaro, tenui, liguſtico vehementiore; odore gravi." " *C. B. in Matth.* p. 546. " Sapore acri & aliquantum amaro, eo fere qui " in liguſtico noſtro obſervatur." *J. B.* iii. 2, 155. And really the proper " juice of leviſticum does not a little reſemble Opopanax. " Saporis eſt acris, " amaricantis, ingrati, aliquatenus nauſeoſi; odoris fragrantis, gravis." *Herm. Cyn.* p. 702. " Saporis acris, amari ingrati, odoris gravis." *Nucl. Belg.* 133. " It is of a very ſtrong not unpleaſant ſmell, and of a warm bitteriſh taſte." *Miller*, p. 322. " Sapore amaro, odore gravi." *Geoff.* ii. 642. Hence though this be a ſubſtance like the former, yet they differ conſiderably. — 2. It is a " very weak purgative, if it be at all ſo. " Vis purgatoria Græcis incognita " fuit. Purgat apud *Meſue*, pituitam craſſam & lentam a remotis partibus, " ut aiunt. Apud noſtros homines vix datur hoc fine: utuntur autem pro " deductorio aliorum purgantium, ut Fallopius nos docet. ... Meſue propinat " a ʒj ad ʒij." But it is a more efficacious diſcutient. " Commendatur " in omnis generis duritiebus, ſtrumis, gangliis, nodis, ſcirrhis viſcerum, " & extrinſecus emplaſtri modo impoſitum. Laudatur in omnis generis " frigidis affectibus, tam interius, quam exterius. Præter hæc menſes & " urinas potenter movet." *C. Hoffman*, p. 47. " Alvum citra moleſtiam pur- " gat." *Geoff.* l. c.

" Analyſi chymica, ex Opopanacis puriſſimi ℔ij prodierunt humorum ʒxj; " olei ʒv. ʒiij. gr. vj. Carbo pendebat ʒxj. ʒj; unde cinerum ʒj. ʒiiiß, ac " inde ſalis alcali fixi ʒij. gr. xlij. (E. terræ ʒj. gr. lxvj.) & jactura fuit ʒiv. " ʒiij. gr. lxvj." *Geoff.* ii. 642: who adds, " Conſtat ex tartaro, ſale ammo- " niacali, & oleo arcte conjunctis." Here is much water and but little oil.

SECT. III.

It is given to ʒj. and is uſed in our mithridatium, theriaca; and is ſometimes prepared like G. ammoniac: but otherwiſe it is little uſed, being left out of the troch. de myrrha; though retained in the pulvis e myrrha comp. *Ph. Lond.* which is a better medicine; and alſo in the pilulæ gummoſæ.

The doſe is commonly made a ʒiß ad ʒj. but there is no danger in ʒij, to which quantity Meſue ordered it.

G. SAGAPENUM.

SECT. I.

Sagapenum. *offic.* Sagapenum. *B. P.* 494. *J. B.* iii. 2, 156. *R. H.* 1843. *Ger.* 1056. *Park.* 1544. Sagapenum, Sacoponium offic. *Schrod.* 740. Gum Sagapenum.—This is a reſinous gum, brought to us in lumps or maſſes, compoſed of drops clotted together with other ſubſtances, of a browniſh colour without, greeniſh within; of a hot, biting, bitteriſh taſte; and ſtrong ſmell, ſomewhat reſembling that of leeks.

According to Dioſcorides Sagapenum is the juice of a ferulaceous plant, growing in Media; Galbanum of a Syrian, and Ammoniac of a Libyan ferula. Vid. *Dioſcor.* l. 3. c. 95, 97, and 98. And we know yet little more of theſe plants than what we learn from thence. "Planta ex qua ſtillat ignota eſt. "Ferulæ ſpeciem eſſe conjiciunt ex caulis partibus & ſeminibus cum hoc ſucco "ſæpius intermiſtis." *Geoff.* ii. 644. *Dale* makes it the

Ferula fœmina Plinii. *B. P.* 148. *T.* 321. Ferula folio Fæniculi; ſemine latiore & rotundiore. *J. B.* iii. 2, 43. *R. H.* 420. Ferula. *Dod.* 321. *Lob. Obſ.* 450. *Ger.* 1056. Ferula tenuiore folio. *Park.* 875. Ferula major ſeu fœmina. *M. U.* 35. Ferula tenuiore folio ſeu fœmina Plinii. *H. Ox.* iii. 309. Ferula foliolis linearibus, longiſſimis, ſimplicibus. *H. Cliff.* 95. Ferula. *offic.* Fennel-giant. *Dale* 118. But on what authority he does this I know not.

"Sagapenum (σαγαπηνον) ferulaceæ herbæ liquor eſt, in Media naſcentis. "Præfertur tranſlucens, foris fulvo, intus vero albo colore, medio inter ſil-"phium & galbanum odore, acrius guſtu." *Dioſc.* l. 3. c. 95.

"It comes from Alexandria." *Schrod. Dale, Miller.* "From Perſia, by "Smyrna and Aleppo." *Sav. Dict.* iii. 503. "Hodie ex Perſia & Oriente "nobis adhuc affertur." *Geoff.* ii. 644.

SECT. II.

It is milder than aſſa fœtida, and more acrid than galbanum, partaking of the virtues of both, yea and of all the fetid gums; called cephalic, nervine, pectoral, uterine; and commended inwardly in all cold, flatulent, and phlegmatic diſtempers; and outwardly for pains, tumors, &c.

"Calfacit:

" Calfacit 3. ſiccat 2. attenuat, aperit, ſubſtantiæ eſt tenuis: tanta extra-
" hendi vi pollere dicitur, ut quoque ſpicula ex carne eliciat. Purgat lentos
" & craſſos, imo & ſeroſos humores ex ventriculo, inteſtinis, utero, renibus,
" cerebro, nervis, juncturis, pectore. Hinc prodeſt in hydrope, tuſſi invete-
" rata, aſthmate, cephalalgia, ſpaſmo, epilepſia, paralyſi, tremore artuum, in
" obſtructione & tumore lienis, febribus intermittentibus, dolore colico; men-
" ſes ciet, (ſed fœtum enecat;) urinam movet. Extrinſecus convenit in pleu-
" riſi aliiſque tumoribus ac doloribus, mitigatione ac reſolutione opus haben-
" tibus. Fumus excitat epilepticos, hordeola ciliarum ſanat. Doſis a ʒß ad
" ʒj. *Præp.* 1. Sagapenum depuratum. 2. Pil. de Sagapeno. 3. Pil. de
" Sag. Camilli. 4. Pil. fœtidæ. 5. Oleum ſtillatitium." *Schrod.* 740.

1. It is an acrid and ſtrongly odoriferous reſinous gum. " Mordaci acri-
" que ſapore, odore viroſo." *J. B.* " Saporis acris, mordacis, nauſeoſi; odo-
" ris viroſi ſi recens, fragrantis gravis." *Herm. Cyn.* 639. " Guſtu acri, odore
" gravi, porrumque æmulante." *Dale* 118. " Odoris eſt alliacei, gravis;
" non tamen ita fœtidi ut aſa fœtida; ſaporis acris penetrantis." *Nucl. Belg.*
134. " Mordaci & acri ſapore, odore viroſo, gravi, ad porri & pinus ſaporem
" accedente, & quaſi medio inter aſſam fœtidam & galbanum." *Geoff.* ii. 643.
—2. The Arabians make it purgative alſo. Vid. *Meſue*, p. 69. " Sagapen
" purges pretty ſtrongly, when given to ʒß." *Chom. H. pl. uſ.* p. 190: and
there is no doubt but any of theſe gums in that quantity will either purge or
vomit. I think ammoniac would prove the ſtrongeſt, and opopanax the weak-
eſt cathartic among them. " Purgatoria (vis) non (videtur a manifeſtis qua-
" litatibus pendere) plane, ſed ita ut valde ab iis promoveatur. Hinc inter
" validiora eſt. Meſue ait nocere ventriculo & hepati, &c." *Hoffm.* p. 64.
" Ea facultas a Græcis ſilentio prætermiſſa. Reipſa purgandi virtute donatur,
" ſed debili & ignava, & ſtimulo eget. Potentiſſime aperit, &c." *Geoff.* ii.
644.

" Analyſi chymica ex Sagapeni puriſſ. ℔ij prodierunt humorum ʒx. ʒvj.
" gr. liv; olei ʒviiiß. gr. xxiv. Carbonis fuerunt ʒviij. gr. lxvj; unde cine-
" rum ʒj. ʒiiiß; ac inde ſalis fixi ſalſi ʒj. gr. ix. (E. terræ ʒx. gr. xxvij.) &
" jactura fuit ʒviij. ʒvj. gr. xlii." *Geoff.* ii. 644. But here the ſum total is
℔ij. ʒiv. gr. xlii.

SECT. III.

It is given to ʒj. but ℈ij. is a large doſe. It is an ingredient in the mithri-
datium, theriaca, & pil. gummoſæ. It is ſtrained like ammoniac.

" Meſue dat a ʒß. ad ʒj, ut Sylvius habet; aur. 1. ut antiqua verſio."
Hoffman, p. 64. " Doſis Sagapeni ʒß. ℈ij. ʒj." *Ph. Bat.* " Intus ſumitur
" a ℈j. ad ʒj." *Geoff.* ii. 645. Uſus obtinuit at nunquam ſolum uſurpetur,
" ſed ſemper cum aliis medicamentis miſtum, et ſæpiùs in pilulari forma, ob
" ingratum ſaporem." *Ibidem.*

If you compare the analyſes of theſe five gums, as *Mr. Geoffroy* delivers
them, you will find that ℔ij. of each yielded very different proportions of prin-
ciples, as follows:

Humorum

	Humor.	Oleorum	Carbonis	Jacturæ	Salis fixi	Terræ.
	℥ ʒ gr.	℥ ʒ gr.	℥ ʒ gr.	℥ ʒ gr.	℥ ʒ gr.	℥ ʒ gr.
Ammon.	7 7 34	9 7 48	8 7 00	5 2 00	0 0 61	0 7 23
Aſæ fœt.	7 2 00	13 7 60	9 2 00	2 4 12	0 0 12	2 0 24
Galbani.	7 6 70	14 4 30	7 1 36	2 4 00	0 0 13	0 5 35
Opopan.	11 0 00	5 3 06	11 1 00	4 3 66	0 0 42	1 0 66
Sagap.	10 6 54	8 4 24	8 0 66	8 6 42	0 1 09	1 2 27

Hence we ſee that we have either little reaſon to depend on the accuracy of theſe analyſes, or on any chymical analyſis, for the confirmation or diſcovery of the virtues of ſimples.

L A C C A.

S E C T. I.

Lacca. *offic.* Lacca officinarum. *B. P.* 499. Garziæ. *Cluſ. Exot.* 158. Acoſtæ. *Ibid.* 258. *J. B.* i. 2, 44. *R. H.* 1535. Gum Lacca.—This is a hard, brittle, ſemipellucid reſinous ſubſtance, of a reddiſh-brown colour, of little taſte or ſmell, but very fragrant and ſweet-ſcented while it is burning: brought from the Eaſt-Indies, adhering to and ſurrounding little ſhort ſticks like a thick cruſt, called *Lacca in ramulis*, or Stick Lac; which is its natural ſtate. Of this is made the *Lacca in granis*, or Seed Lac; and *Lacca in maſſis vel maſſulis*, Shell Lac.

" There are three kinds of Gum Lac, viz. Seed Lac, which is in ſmall, " bright, reddiſh grains: of this melted is made the Shell Lac, which is in " flat thin tranſparent pieces, of a reddiſh-brown colour, and is the beſt ſort: " the Stick Lac is what comes upon ſhort ſticks, which are covered over by " it; and this is as it is in its native ſtate." *Miller's Bot.* p. 248. But in the *Mem. Acad.* 1714. ſix ſorts of Lac are deſcribed.

Lac is commonly called a vegetable gummi reſina; but more probably it is an animal production, though perhaps the greateſt part of it may be originally vegetable, and only collected by inſects, as wax is by bees. However, Amatus Luſitanus, I think, is the firſt who made Lacca an animal ſubſtance, or ſuch a ſubſtance as wax is, and not the gum of a tree; which Garcias, Bontius, and more lately father Tachard confirmed: and Mr. Geoffroy's obſervations ſeem to have put it out of doubt. " Amatus ſcribit, in errore verſari " eos qui cancamum laccam eſſe putant: laccam enim non eſſe gummi aut " plantæ alicujus guttam, ut hucuſque omnes fere crediderint; ſed potius " formicarum alatarum ſtercus, fabagove, velut cera apum." *J. B.* i. 2, 45. " In vaſtæ arboris ſurculis, & minutioribus ramis, magnæ formicæ, in terræ " viſceribus aliiſque locis enatæ, hanc Laccam elaborant (ut apes mel con- " ficiunt) materiam ex ipſa arbore exſugentes. . . . Formicas autem hanc Lac- " cam elaborare, inde manifeſtum eſt, quod plerumque alæ formicarum Laccæ " permiſtæ conſpiciuntur." *Garcias*, l. c. " Unicum hoc addo, quod formicæ " iſtæ alatæ ſunt, ac coloris punicei, ac ſuper flores, frutices, arbores, ac

" herbas circumvolitant, ex quibus, non ſecus ac apes, Laccæ conficiendæ " materiam colligunt, ac in communes operas conferunt; non alatæ autem " formicæ eam non elaborant." *Bontius in Garc.* c. 8. fol. 4. a.

" *F. Tachard*, Jeſuit, was miſſionary in the Eaſt-Indies, an. 1709. Accord- " ing to him, little red ants depoſit on the branches of ſeveral trees a red " moiſture, which hardens in five or ſix days, and is very different from the " gum or tear iſſuing from thoſe trees when wounded. Theſe ants feed on " flowers, and may be looked on as the bees, the lac being the honey. They " work eight months in the year, and reſt during the rains." *Hiſt. Acad.* 1710. See alſo *Mr. Geoffroy's Obſ. on the Lacca, Mem. Acad.* 1714. where the ſtick Lac is particularly deſcribed; and appears to be a kind of hive, conſiſting of many and pretty uniform cells; containing ſmall red friable bodies, of as fine a colour as cochineal when powdered, for the moſt part hollow, but ſometimes full of mouldineſs, and ſometimes of a powder; amongſt which microſcopes diſcover a great many long, ſlender, many-footed, tranſparent inſects. Theſe ſmall red bodies ſwell in water and tincture it, and ſtink in the fire like animal ſubſtances. Are they the involucra or embryos of inſects? Thus *Mr. Geoffroy*. It is not in his *M. M.*

Some have taken Lacca to be the cancamum Dioſcoridis, l. 1. c. 23. But it ſeems to have been unknown to the ancient Greeks, and the latter Greeks to have got it from the Arabians. *Myrepſus* has an antidotus dialacca, wherein it is called λακκα, των βαφιων, Lacca infectorum. *Antidot.* c. 123. col. 387. Vid. *Bod. in Theoph.* p. 835.

SECT. II.

The gummi-reſinous part ſeems to agree with wax, as the tincturing or animal part in it does with cochineal, in virtues. It is called diaphoretic and diuretic; and commended in the aſthma, dropſy, jaundice, &c. though with little reaſon. It is expelled the *London M. M.* and is uſed *here* only in the tinctura Laccæ, for ſcorbutic gums, and the like.

" Calfacit (aliis temperate, 2.) attenuat, aperit, ſanguinem purificat, ſu- " dorem ciet, diuretica eſt. *Uſus præcip.* in obſtructionibus lienis, veſicæ, " fellis, epatis, ac pulmonum; & hinc in hydrope, ictero, aſthmate, apoſte- " mate pulmonum; in expellendis variolis, morbillis, atque peſtilentiali con- " tagio, in ciendis menſibus, &c. *Præp.* 1. Lacca lota, ſeu præparata. 2. Trochiſci de Lacca." *Schrod.* 723.

1. It diſcovers no acrimony to our ſenſes; and appears to be more difficultly diſſolved than wax itſelf: " Sapore nullo evidente." *J. B.* " Prunis im- " poſita bullat primum, levem odorem reſinoſum ſpirans, tandemque flam- " meſcit." *J. B.* " Saporis eſt reſinoſi, odoris dum accenditur fragrantis " ſulphurei, nonnihil acidi, & ſpiritibus noſtris mire grati." *Herm. Cyn.* p. 647. " Sapore reſinoſo, odore dum accenditur grato." *Dale* 306. " Saporis eſt " reſinoſi, accenſum reddit odorem gratum & fragrantem." *Nucl. Belg.* 133. (2) Lac does not diſſolve nor liquify in oil olive, nor even tincture it though heated over the fire: hence it is evidently not a roſin purely. But it gives a yellowiſh red tincture to ſp. terebinthinæ, a part remaining indiſſolvable. (β) Sp.

vini

vini draws a pale red tincture from it, which water ſoon turns milky, precipitating a grayiſh-white roſin. (γ) It communicates a purple colour to ol. tartari, whence by an acid a brown roſin may be precipitated. Hence ſp. vini and the alcali diſſolve only the more reſinous part. (δ) Spir. vitrioli and Spirit of nitre turn Lacca into a pale yellow, but are not tinctured by it; yet, boiled in water with an acid, it makes a fine red. Vid. *Lem. Dict.* p. 288. How much of the ſhell Lac will ſp. vini diſſolve? — 2. It yields much the ſame principles with cera apum; though it does not, like wax, melt in oil. "By a chemical analyſis, Lacca yields an acid ſpirit and a butter like wax, "as Lemery obſerves, if freed from the animal parts; for otherwiſe it gives "alſo a volatile ſpirit mixed with the acid." *Mem. Acad.* 1714. l. c. — 3. It is the animal part which affords the fine colour; and this is eaſily extracted with water; to which the diaphoretic virtues, if any ſuch it has, belong. The gummy or waxy part I reckon indiſſoluble by the vis vitæ; and therefore uſeleſs internally.

"Utimur ejus tinctura ad gingivas laxas, cruentas, eroſas & putridas." *Nucl. Belg.* 133. And *Fuller*, *Ph. Extemp.* has a tincture made ex Laccæ ℥ß, & allum uſti ʒj digeſted in a weak ſp. cochleariæ, with the ſame intention. "Ad gingivas ſcorbuto corruptas ſingulare eſt." *Our diſp.* has a more compound one. But if they owe any thing but the colour to the Lacca, it is more than I know; and the ſuppoſing it ſeems owing to a miſtake, viz. that Lacca is the Cancanum; of which, among other things, Dioſcorides (l. 1. c. 23.) ſays, "Quin & adverſus gingivas humore prægnantes, & ad dentium dolores, "eſt ſiquid aliud efficax."

MYRRHA.

SECT. I.

Myrrha, *offic.* Myrrha σμυρνα Dioſcoridi, Theophraſto, Galeno. *B.P.* 501. Myrrha. *Matth.* p. 87. *J. B.* i. 2, 311. *Park.* 1593. *R. H.* 1841. Garciæ *Cluſ. Exot.* 157. Myrrha, *offic.* Σμυρνα, Dioſcor. Μυρρα, Hippocratis. *Geoff.* ii. 637. Myrrh—is a reſinous gum in lumps or drops of different ſizes, of a brown or reddiſh-yellow colour, ſomewhat pellucid, and not hard to powder; of an oily aromatic bitter taſte, and pretty fragrant ſmell. It ſoftens in the mouth and ſticks to the teeth; and when recent is fattiſh. "Powdered it is of a bright yellow colour." *Miller's Bot.*

The myrrh tree is ſaid to grow in Arabia and Ethiopia; but we know no more about it. The gum comes either by the way of the Eaſt-Indies, or from the Levant. "Plurima adfertur ex Arabia ad nos Myrrha, quæ Indis Bela "dicitur, tum etiam ex Æthiopia. Qualis vero ſit arbor quæ eam profert, "aut qua ratione reſina eliciatur, nunquam ſcire potui." *Garc.* l. c. "Myrrh "is imported to Marſeilles, from the Levant, in large *bales de cuir*, of four "or five hundred pounds weight." *Sav. Dict.* ii. 843. "It comes from Ara-"bia Felix, by Egypt, Holland, and England, from 100 to 150 quintals "annually." *Savary's Dict.* iii. 527. "It is brought from the Eaſt-Indies." *Mill. Bot.* 305. "Defertur Myrrha ex ea Æthiopiæ parte, quæ regio Tro-"glodytarum olim dicebatur." *Geoff.* ii. 637.

Myrrha, Græce σμυρνα (which we find oftener than in *Hippocrates*) Æolice dicitur μυρρα, from μυρον unguentum. Though, according to the poets, it has its name from *Myrrha*, the daughter of *Cynara king of Cyprus*, who was metamorphoſed into this tree, for being criminally in love with her father. Vide *Ovid's Metamorph.* l. 10. v. 298—502; who ends thus:

" Quæ quanquam amiſit veteres cum corpore ſenſus,
" Flet tamen; & tepidæ manant ex arbore guttæ.
" Eſt honor & lachrymis: ſtillataque cortice Myrrha
" Nomen herile tenet, nullique tacebitur ævo."

If you want to know what the ancients thought of Myrrh, ſee *Theoph. Hiſt.* l. 9. c. 4. *Dioſcor.* l. 1. c. 77. *C. Hoffman*, l. 2. c. 154. *J. B.* &c.

SECT. II.

It is attenuant, antiſeptic, diaphoretic, anodyne, and cordial; called nervine, ſtomachic, uterine, alexipharmic, febrifuge, and anthelmintic; and commended internally in female obſtructions, difficult labour, hyſteric diſorders, jaundice, intermitting and malignant fevers, worms, and in all cold phlegmatic and flatulent diſeaſes, (*ubi languet natura*;) and externally for wounds, ulcers, carious bones, gangrenes, &c.

" Myrrha calfacit & ſiccat 2. (aliis 3.) aperit, ſubaſtringit, attenuat, matu-
" rat, diſcutit, putredini reſiſtit. *Uſus præcip.* in uteri obſtructione, fœtu ex-
" pellendo, in pulmonum & inteſtinorum mucilagine, ac inde nata raucedine,
" tuſſi, & angina, pleuritide, colica, lumbricis; compeſcit diarrhœam ac dy-
" ſenteriam; febrium rigorem, præcipuè quartanæ, arcet. Extrinſecus pro-
" deſt in igne ſacro, gangræna, tumoribus, vulneribus inveteratis & recenti-
" bus, imprimis capitis, unde in emplaſtris ſticticis, ut vocant, uſus ejus cre-
" berrimus eſſe ſolet. Maſticata ac ſubinde deglutita, halitus fœtorem emen-
" dat, coryzamque curat, &c. Doſis a ℈ß ad ℈ij. vel ʒj. *Præp.* 1. Myrrha
" depurata. 2. Myrrhæ extractum, ſp. vini. 3. Oleum myrrhæ. 4. Liquor
" Myrrhæ. 5. Trochiſci de myrrha." *Schrod.* p. 727.

1. It is a warm, aromatic, and pretty bitter reſinous gum; " ſapore amaro,
" ſubacri; odore nares ferit acriter, ubi adoletur; nam flammam concipit; nec
" aquæ immerſa diſſolvitur ut gummi, ſed diutius in ea relicta limi inſtar diſ-
" fluit & flaveſcit." *J. B.* " Saporis ſubacris, amari, & aromatici; odoris
" fragrantis. Myrrha ſtacte eſt quæ ſua ſponte effluit." *Herm. Cyn.* 677. De ſtacte. vid. *Hoffm.* l. c. N°. 8, 9, 10. " Saporis eſt amari, acris; odoris
" fragrantis." *Nucl. Belg.* 202. " Sapore amaro, ſubacri, aromatico, nauſeoſo
" tamen; odore gravi, nares feriente, dum conteritur, nec inſuavi ſuffitu,
" dum comburitur." *Geoff.* ii. 637. — 2. It flames in the fire, does not diſſolve intirely in ſpirits or oils or water. *N.* Water diſſolves about two thirds of it; ſp. vini rect. not ſo much. *Qu.* Is the gummous or reſinous the moſt active part; or is its bitterneſs lodged in the gum or roſin? Probably equally in both; which can be extracted with common proof ſpirits, which conſequently are the beſt menſtruum. Such a ſolution is both very bitter and odoriferous.
" Myrrha non perfecte oleaginoſis diſſolvitur, ſed partim grumeſcit; nec etiam

" aqueis facile & expedite diluitur, ſed in aqua relicta major pars non diſſoluta " limi inſtar diffluit. Sp. vin. rectificatus diuturniore digeſtione extrahit tinc- " turam, ſeu partem reſinoſam, gummoſa tantum remanente portione, odoris " & amaroris prorſus experte, quæ aquâ diſſolvitur, aut ſaltem molleſcit & " in mucum lentum ac viſcidum convertitur. Tota diſſolvitur ſpiritu vini " tartariſato, aut conſociato cum ſp. urinoſo ſalis ammoniaci." *Geoff.* ii. 638. " The committee are ſurpriſed that authors of great name ſhould ſo un- " accountably aſſert Myrrh to be indiſſolvable either in water or ſpirit of wine, " without the aſſiſtance of much art: whereas, on the contrary, boiled in " water it diſſolves freely, and, while the water is boiling hot, keeps almoſt " intirely ſuſpended; but, when the water is cold, about one third only, or " leſs, ſubſides, much the greater part remaining united with the cold water. " This water, evaporated, leaves a gum diſſolvable again in water, but will " not give ſo much as a tincture to ſpirit: ſpirit will take up a great part " of what precipitates from the decoction, the reſt ſeeming to be dregs. " Nor has the committee found that macerating the Myrrh with ſalt of tartar " will enable ſpirit to diſſolve more of the Myrrh than the reſinous part now " mentioned; and the ſame quantity may be extracted by ſpirit from the " whole Myrrh without any ſuch preparation." *Pemb. Diſp. Narrative*, p. 86. Vid alſo *Boerh. Chem.* ii. *proceſ.* 57. p. 231. and *Lewis's Pharm.* p. 134. Is none of the eſſential oil loſt in boiling Myrrh in water? How much Myrrhæ diſſolves in alcohol vini? And how much in common brandy? Vid. *N. Diſp.* p. 164. — 3. It is much uſed both outwardly and inwardly, and with great ſucceſs in promoting the fluxus menſium, & hæmorrhoidum, and conſequent- ly hurtful in pregnancy, and to ſuch as are ſubject to hæmorrhages, or are of a ſanguine and plethoric conſtitution. I cannot therefore commend it in the pleuriſy, ſmall-pox, meaſles, internal ulcers, dyſenteries, and the like, as many do, (vid. *Schrod. Geoff.* &c.) thinking it ſeldom ſafe in ſuch caſes. " Vim habet calfaciendi, (fluxiones ſiſtendi is wanting often) ſoporem in- " ducendi, (καρωτικη) &c. *Dioſcorid.* l. 1. c. 77. p. 42. And *Galen* ſays, " Papaverus ſuccus, et Myrrha, et ſtyrax, et crocus, ſi largius bibantur, " quædam dementant, quædam mortem inferunt." *Simpl.* l. 5. c. 19. p. 37. C. (where is an account of a lady killed by opium, which is very well worth obſerving). Though I will not call Myrrh narcotic like opium, yet I think it partakes much of the nature of ſaffron, and that it may be ſaid to rarify the blood no leſs than crocus, and to be anodyne, as Galen obſerves elſewhere. (Vid. *Hoffm.* p. 364. § 31.) and that it ſometimes occaſions the head-ach.

" Analyſi chymica, ex Myrrhæ electæ lbij. prodierunt humorum ℥x, " gr. xxxiv: oleorum ℥. ℈v. gr. lxviii. Carbonis fuerunt ℥ix. ℈vj. gr. liv; " unde cinerum ℥ij. ℈iiß, ac inde ſalis fixi ſalſi, gr. xviii. (E. terræ ℥j. ℈iij. " gr. xviii.) & jactura fuit ℥vj. ℈ij. gr. lxx." *Geoff.* ii. 637.

SECT. III.

Myrrh may be given to ʒß. It is uſed in the Tinctura Laccæ, T. Myrrhæ, T. M. & Aloes, Elixir proprietatis utrumque, Pulvis Diateſſaron, Mithrida- tium, Theriaca *And.* Th. *Edinenſis*, Pilulæ Ruſi, P. gummoſæ, P. pectorales,

P. Stomachicæ, Trochiſci Cypheos, T. Hedychroi, T. de Myrrha, emplaſtrum cephalicum, & E. oxycroceum. In the *Ph. Edin.* ed. 1744. the oleum Myrrhæ, and ſeveral compoſitions in which Myrrh was formerly uſed are omitted.

Doſis ad ʒj Schrodero: ad ϑij. *Nucl. Belg:* a ϑß. ad ʒß, *Geoff.* "Datur a "ϑß ad gr. xv. in pilulis convenientius, & in parva doſi, ob inſignem ama-"ritiem; in majori doſi alvum laxat. . . In halitibus uteri putridis, ℞ Myrr. "gr. iv, croci gr. iij, zedoariæ ϑß, conſ. anthos q. ſ. F. bolus. . Convenit "etiam, me experto, in tertiana & quartana, quas aliquando fugavi hoc modo. "℞ Myrr. ϑß. ſalis abſinth. ϑj. extr. gentianæ, vel abſinthii, cent. minoris "āā ʒß. F. pilulæ, paulo ante paroxyſmum, etiam ſi placuerit diebus vacuis, "aſſumendæ." *Herm. Cyn.* 677. If you want the oleum Myrrhæ p. d. Mr. Geoffroy very particularly directs the making of it. It is now out of uſe.

OLIBANUM.

SECT. I.

Olibanum, Thus, & Thus maſculum. *offic.* Thus ſive Olibanum officinarum. *B. P.* 501. Thus, Arabibus Lovan, Avicennæ Conder, i. e. reſina, dictum. *Garc. Cluſ. Exot.* 157. Thus. *J. B.* ii. 2, 302. *Ger.* 1435. Olibanum, ſive Thus. *Park.* 1602. *R. H.* 1840. Olibanum or Frankincenſe:—which is a hard, yelloviſh-white or light-browniſh coloured gummy roſin, ſcarcely pellucid; in drops of different figures and ſizes, often roundiſh; of a warm, bitter, reſinous taſte, and fragrant ſmell.

"Sicca autem, at pinguior tamen eſt Thus lachryma, quam maſtiche, ſta-"timque in luculentam, pertinacemque flammam exardet, odore multo im-"becilliore, ſed nihil per incendium ſtillat, ut maſtiche: dentibus ſtatim fria-"tur, iis adhæreſcit, nec cogitur denuo. Sapore eſt amaro, & modice acri, "non ingrato tamen, Cæſalpino adſtringente ſubamaro: colore eſt ex albo "fulveſcente, minuſque pellucet quam maſtiche, colore candicante, aut ſub-"ruſſo; tranſlucidæ guttæ, alias ſingulares, alias gemellæ teſticulos aut mam-"mas, prout eæ majores minoreſve fuerint, imitantur, unde & mammoſi & "maſculi Thuris cognomenta: interdum quaternæ aut quinæ, magnitudine "ciceris, avellanæ, & majores; adhærentes nonnunquam ſuo cortici, unde "exſudarunt: friatur vero immundior, ex grumorum attritu decuſſa, manna "Thuris apud Græcos appellatur." *J. B.* l. c.

By the bark ſometimes adhering to it it appears to be the gum of a tree, which is ſaid to grow in Arabia; but what kind of tree it is, we are to this day ignorant; although the Olibanum has been known and uſed as early as we have any account of ſuch things; being mentioned, not only by *Hippocrates*, but by *Moſes*, *Exod.* xxx. 34. . . . . "Sola India nigrum Fert ebenum; "ſolis eſt Thurea virga Sabæis," ſays *Virgil*, *Georg.* l. 2. v. 116. "Ex Tur-"cia & India Orientali ad nos tranſportatur." *Dale* 349. "It is brought "into France by the way of Marſeilles. That which comes from the Indies "is not ſo good." *Sav. Dict.* i. 1804. "Olibanum is taxed as a commodity "coming from the Levant." *Id.* ii. 896. "Encens comes from Alexandria "in

" in Egypt to Marſeilles, to the quantity of three or four quintals in a year." *Id.* iii. 483. " Olibanum is brought from the Indies." *Miller's Bot.* 320. According to *Mr. Geoffroy*, ſome write that Arabia Sabæa only produces Thus; others that Ethiopia alſo yields it, " cujus quidam populi Sabæi quoque nuncupabantur." ii. 550. An recte? Minimè.

I ſhall not take time to repeat what authors have ſaid of this tree, ſince there is little agreement among them, and as little certainty. Conſult, if you pleaſe, *Theophraſt. Hiſt.* l. 9. c. 4. &c. with *Bodæus*, p. 979. *Dioſcor.* l. 1. c. 81—84. *Plin.* l. 12. c. 13. p. 307. Or, inſtead of all theſe, *J. B.* l. 1. and obſerve that the Olibanum is a modern corruption of λιβανος, for ſo it is called by Theophraſtus, Dioſcorides, &c. and is *Thus* in Latin. Hippocrates has λιβανωτος ὀρσην; and alſo, according to *B. P.* 399, λιβανωτε καρπος, for the gum. From λιβω, ſtillo, comes λιβανος; as from θυω, ſuffio, ſacrifico, Thus, whence θυος and θυμιαμα, ſuffitus, incenſum, and thence our incenſe, and frankincenſe. The uſe of incenſe in ſacrifices, as directed by the Moſaic law, was very great; as it was alſo in the pagan world: and many Chriſtian churches have not yet laid it aſide in their religious aſſemblies; for which there may be ſeveral reaſons.

" Quod ex eo guttæ rotunditate pependit maſculum vocamus; cum alias " non fere mas vocetur, ubi non ſit fœmina. Religioni tributum, ne ſexus " alter uſurparetur. Maſculum aliqui putant a ſpecie teſtium dictum. Præ- " cipua autem gratia eſt mammoſo, cum hærente lachryma priore conſecuta " alia miſcuit ſe. . . Micas concuſſu eliſas mannam vocamus." *Plin.* l. 12. c. 13. p. 307. " Verbenaſque adole pingues & maſcula Thura." *Virg. Ecl.* 8. v. 65. " Ratione figuræ eſt vel Indicum, quod eſt in glebis; vel mammoſum, quod " eſt in guttis; vel maſculum, quod eſt in granis." *Herm. Cyn.* 646.

SECT. II.

It is attenuant, diaphoretic, cordial, and anodyne; called cephalic, pectoral, ſtomachic, and vulnerary: and is commended internally in coughs, vomittings, fluxes, hæmorrhages, as agreeing with maſtich in virtues, though it partakes much more of the nature of myrrh; and externally may be of uſe in pains, wounds, ulcers, &c.

" Calfacit 2. ſiccat 1. ſubaſtringit. *Uſus præcipui* intrinſecus ad varios ca- " pitis & pectoris affectus, ut & ad alvi, uterique profluvia, ad tuſſim (de- " glutitur veſperi fruſtatim) vomitum, ſanguinis excreationem, diarrhœam, " dyſenteriam, mitigandam. Extrinſecus inſervit ſuffitibus pro capite robo- " rando, catarrhos diſcutit, cava ulcera carne replet & ad cicatricem perducit, " cruenta vulnera cephalica inprimis glutinat, perniones (cum ſuillo adipe aut " anſerino) ſanat, ulcera cacoethea, tum ſedis, tum aliarum partium demulcet " (tritum cum lacte in linimentum) oculorum rubedini ac lippitudini medetur, " (ſcil. aqua roſarum multiplici extinctione Thuris imprægnata, lactique mu- " liebri poſtmodum commixta, pro collyrio liquido) verrucas incipientes & " impetigines abigit (cum pice & aceto impoſitum). *Præp.* 1. Liquor (fit " ut liquor myrrhæ) ſumme prodeſt ad maculas abſtergendas, cavitateſque " cicatricum explanandas. 2. Elect. Diaolibanum." *Schrod.* 750. Ex *Dioſcoride* præcipue.

1. It

1. It is a ſubacrid, aromatic, bitter, gummy roſin. Vid. *J. B.* ſupra. "Saporis eſt amaricantis, reſinoſi; odoris fragrantis. Maſtiche fragrantius & ſuavius, cæteroquin cum ipſo convenit." *Herm. Cyn.* 646. "Saporis amaricantis & reſinoſi; odoris fragrantis. Stillat ſponte ſua ex arbore." *Dale* 349. "Saporis reſinoſi, amari, ſubacris, adſtringentis; odoris, cum accenditur, fragrantis & gravis." *Albin. MS.* "Salivam reddit lacteam dum manducatur." *Nucl. Belg.* 291. "Saporis amaricantis, modice acris, & reſinoſi non ingrati; odoris fragrantis." *Geoff.* ii. 349. On red-hot iron it melts only in part, but does not run like maſtich, ſtill retaining its figure; then it flames long, becomes red and at laſt white, leaving a ſixth part, or more, of its weight in white aſhes, viz. two out of eleven parts. Hence it differs much from maſtich; as is evident alſo in chewing them; and is not a pure roſin. — 2. The liquor or oleum p. d. Olibani & myrrhæ have the ſame effects attributed to them, as they are prepared the ſame way. Beſides—3. Olibanum is ſuppoſed to be not only anodyne, but alſo ſomniferous, if not ſomewhat narcotic. "Verum in ſecunda valetudine hauſtum (inſaniam Matth.) furorem (μανιωδης ἐστι) inducit, & largius cum vino potum etiam interficit." *Dioſcor.* l. 1. c. 81. p. 46. "Verum (ſays *Geoff.* ii. 552.) Galenus & cæteri medicinæ ſcriptores, hac de Thuris noxa alte ſilent. Nihilque noxium in illius uſu quotidiano deprehenditur." Yet Galen (l. 2. κ. τοπ. fol. 137. B.) ſays, "In dolore capitis, & omnibus aliis circa caput obortis affectionibus, vitanda ſunt viticis ſemen, abſinthii ſuccus. . . Amplius autem offendunt myrrha, thus, hederæ cacumina, &c." Although elſewhere he makes it anodyne again and again; and alſo compares it, in ſome of its effects, with myrrh and crocus. "Revera totum id quo officit conſiſtit in humiditate excrementitia, qua ſoporiferum eſt." *Hoffman*, p. 453. § 11. Avicenna owns it cauſes head-achs ſometimes. "Et quando, ſays Serapio, bibunt de eo ſani, parum meliorat eos, ſed ſi nimis cum vino biberint, inducit maniam, & amplius cum vino occidit." Vid. *J. B.* i. 2, 307. who is againſt uſing it, not only internally, but even in ſuffitu alſo. Upon the whole, I think, its effects very analogous to thoſe of myrrh; and where the one is hurtful the other ſhould be ſhunned: and conſequently that it cannot be a proper remedy in hæmorrhages, or inflammatory diſeaſes: neither do I ſee cauſe to call it aſtringent; though, as diaphoretic, &c. it may ſometimes do ſervice in fluxes, coughs, and phlegmatic diſeaſes. "Notat Avicenna Thus conferre rationi, ipſamque corroborare, & eſſe quoſdam quibus præcipitur ut ejus infuſum aſſueſcant jejuni, ſed ejus uſum plurimum dolorem capitis excitare. . . Avicenna etiam uſum Thuris plurimum cum vino interficere pronunciavit, ac ſimiliter cum aceto." *J. B.* i. 2. 307.

"Singulare ſpecificum habetur adverſus pleuritidem, præſertim epidemicam. Adverſus hunc morbum Quercetanus in pharmacopœia laudat pomum excavatum Olib. pulv. ʒj repletum, poſtea operculo tectum, & ſub cineribus coctum, quod æger deglutiat ſuperbibendo aq. card. benedicti ʒiij: poſtea vero debite contectus ſudet. Riverius in obſ. teſtatur multos ex pleuritide ad extrema fere redactos, uſu illius pomi cum Olibano cocti reſtitutos viſſe; unde præter ſpem vel copioſus ſudor, vel anacatharſis libera ſequebatur. Hoc remedium ſæpe felici cum ſucceſſu, poſt V. S. bis terve celebratam exhibui, licet non ſemper. Si prima vice exhibito remedio, ſudor non ſuc-

"succedat, post sex horas elapsas iterandum est." *Geoff.* ii. 551. "This me-"thod was followed for a whole year, at the hotel Dieu by Mr. Hangard, "with surprising success; but the next year it had scarce any success at all." *Douglass's Geoff.* p. 362. A dangerous experiment may sometimes succeed, though imprudently made. Nature may only want a stimulus sometimes, to throw off what is hurtful; which may succeed, although contrary to what is indicated by the disease, and produce an effect contrary to the nature of the (stimulating) medicine, as here vomiting seems to have been. *Utatur ita qui vult, non ego.*

"Analysi chymica Olibani ℔ij præbuerunt phlegmatis ʒix. ʒij. gr. xviii; "olei ʒxiii. ʒij. gr. liv. Carbonis fuerunt ʒv. ʒvij. gr. xliii; unde cinerum ʒj. "ʒiij. gr. vi, ac inde salis fixi alcali gr. xxii. (E. terræ ʒx. gr. lvi.) & jactura "fuit ʒiv. ʒiii. gr. xxix." secundum *Geoff.* ii. 550. But here the sum is ℔ij. ʒj: and by my experiment there ought to have been cinerum ʒv.

SECT. III.

It may be given to ʒß. but the dose is not generally determined. "Dosis "est a ℈j. ad ʒj. aut ʒij." *Geoff.* ii. 551. I think it safer to keep within bounds than to exceed.—It is used in the diascordium, mithridatium, theriaca, pilulæ de styrace, emplastrum defensivum, & empl. oxycroceum.

OPIUM.

SECT. I.

Opium, Opium Thebaicum. *offic.* Opium Acostæ. *Clus. Exot.* 257. *B. P.* 494. *J. B.* iii. 392. *R. H.* 854. Opium Mauritanis & Indis Ofium. *Garc. Clus. Exot.* 154. Opium quod Asia cum Ægypto Afiuun & Ofiuun vocat. *Kæmpf. Amæn. Exot.* 642. Opium.—This is got from the

Papaver, Papaver album. *offic.* Papaver hortense, semine albo, sativum Dioscoridi, album Plinio. *B. P.* 170. Papaver sativum. *Dod.* 445. *J. B.* iii. 390. *R. H.* 853. Papaver sativum album. *Ger.* 369. Papaver simplex sativum album. *Park.* 365. Papaver hortense. *H. Ox.* ii. 275. Papaver album sativum. *Kæmp. Am.* 639. Papaver foliis simplicibus glabris, incisis. *H. Cliff.* 200. The White Poppy:—the milky juice whereof inspissated is the Opium, which, as we get it, is a softish, dark, reddish-brown resinous gum, of a very hot bitter taste; and strong soporiferous smell: brought from the Levant and East-Indies in cakes of different sizes.

That our Opium is the proper juice, and neither the extract nor expressed inspissated juice, of this Poppy, is evident, not only from the testimonies of famous travellers, such as Garcias, Bellonius, Tavernier, Kæmpfer, &c. but also from comparing the inspissated milky juice, drawn from our own Poppies, with the Opium of the shops, which agree in almost every thing; whereas the expressed juice and extract agree with it almost in nothing. To which I might add the resinous nature of Opium, its strength, and price. See these arguments

ments at full length in the *Medical Eſſays*, Edit. 1747. *Vol.* 5. *Art.* 12. *Sect.* 1. p. 95—105. where the objections againſt it are alſo fully anſwered. And let me obſerve once for all, that what I deſign here is only an abridgment of that Eſſay or Diſſertation on Opium, which you have, *Med. Eſſ.* 5. p. 93—147; which contains the fulleſt account of every thing concerning this celebrated drug that I can give.

That the Opium is got from the White Poppy is contradicted by ſome; the ancients being of opinion that it was from the Black. But it is the ſame Opium, whether from the one or the other: and the white having the largeſt heads of any here, it is probable they will be choſen; and that it is ſo is allowed by Garcias, Bellonius, and Kæmpfer.

It is not certain when Opium was firſt introduced into medicine; but the little uſe made of it by Hippocrates, and Diagoras his cotemporary condemning its uſe in diſeaſes of the eyes, makes it probable that its virtues were not known long before him. And it ſeems to have been but little uſed inwardly as hypnotic before Heraclides of Tarentum, *i. e.* for 200 or 300 years after Hippocrates: for although it has been the opinion of ſome of the learned that the Nepenthes of Homer was Opium, which Helena learned of the Egyptians; yet this is but a meer conjecture without foundation, ſince none of the ancients thought ſo; and the names by which Opium is known in Egypt, as well as in Arabia, Perſia, India, are evidently derived from the Greek *Opion*, though none of its moſt ancient names.

As for the Poppy; it is evident, that on ſome account or other it was carefully cultivated long before Hippocrates was born: for even Homer mentions the μηκων ἐνι κηπω; and the Papaverum capita in Tarquin's gardens are celebrated by all the Roman hiſtorians. The invention of it is attributed to Ceres, thence ſometimes called Mecone; not on account ſurely of its narcotic quality, but becauſe of its ſeed being very early uſed in food, and particularly in deſerts: it is called nourſhing by Hippocrates.

It is alſo certain that our Poppy is not ſpecifically different from the μηκων and Papaver of the ancients; as will appear to any who will compare what is to be found here and there in Theophraſtus, and in Dioſcorides concerning it, with the plant before us; and conſequently that our Opium is the ſame with theirs.

SECT. II.

Opium is anodyne, hypnotic, narcotic, diaphoretic, antacrid and cordial: it relaxes the fibres, thickens the humors, and checks all violent motions; is called attenuant, aſtringent, and cooling; and commended in intenſe pains, watchings, ſpaſms, ſpleen, vapours, fluxes, hæmorrhages, the teneſmus, and indeed in all diſeaſes from tenſion or irritation of the nerves, irregular motions of the ſpirits, or from thinneſs or acrimony of the fluids.

" Opium vim poſſidet ſpiritus commotos, inquietos, ſeditioſoſque compeſ-
" cendi, facultatique animali, peculiari quadam proprietate, torporem indu-
" cendi. Unde ſomnus, ſenſibilitatis imminutio, &c. Media ſane maximi
" ſolaminis in vigiliis, doloribuſque intenſis. Verum enimvero nec & ſuis in-
" commodis Opium caret, nimirum præterquam quod excretiones urinæ &
" fœcum

" fœcum ſupprimat, malignitatem quoque exercere aptum eſt. Hac vide-
" licet livorem artuum, frigidoſque ſudores, reſpirationem parvam, ac diffici-
" lem, mentis alienationem, &c. inducit. *Scribonius.* N. De caliditate & fri-
" giditate maxime controvertitur. Plurimi tamen cum recentioribus calidum
" id probant, inducti amarore, inflammabilitate, acredine, vi exulcerandi, &c.
" Alii cum majoribus frigidum id demonſtrant, virtuti ſcil. inſiſtentes nar-
" coticæ, quam obtinet. Diſputatio, mehercle, citra neceſſitatem. Etenim
" ſtatuatur calidum, reputetur frigidum, quid inde? Nec enim in copia ad-
" hibetur tanta, ut metuenda inde inferre poſſit incommoda. Verumtamen
" calidum potius dicendum eſſe quam frigidum, potiores evincunt rationes:
" nec obſtat vis narcotica, utpote quæ non a frigiditate, ſed occultâ qualitate
" procedit. Similem enim ναρκωσιν obſervare licet in nonnullis correptis peſte,
" febribuſve malignis & ardentibus. In quibus ſane quicunque narcoſin ad
" frigiditatem referre voluerit, igni frigiditatem attribueret. *Præp.* 1. Ex-
" tractum. 2. Laudanum opiatum multiplex. 3. Laudanum liquidum va-
" rium, &c." *Schrod.* p. 728 ad 734.

1. Opium is acrid, bitter, and ſtrongly odoriferous. " Præſtantiſſimus
" vero ſuccus eſt, qui denſus & gravis; odoratu ſoporifer, (καρωτικος) guſtu
" amarus, &c." *Dioſcor.* l. 4. c. 65. p. 267. " Opium non modo guſtu
" amarum percipitur, ſed etiam acre, adeo ut paululum in ore detentum, lin-
" guam & palatum exulceret." *Matth.* 746. " Commanſum dentibus ad-
" hæreſcit, ſaporemque amarum repræſentat; odore eſt viroſo, καρηβαρικω,
" & candelæ admotum in luculentam flammam exardet." *J. B.* iii. 395.
" Eſt ſaporis, ſubacris, amari; odoris viroſi, narcotici, & quaſi ſtupefacientis."
Herm. Cyn. 624. " Odore ſoporiferum ac graveolens; ſapore amarum & acre."
Dale 208. " Odoris eſt graveolentis, & ſaporis amari ingrati." *Nucl. Belg.*
216. " Odoris viroſi, ſoporiferi; ſaporis amari, acris." *Geoff.* ii. 687. If one
attentively taſtes Opium, he will perceive firſt a nauſeous and diffuſive bitter-
neſs; then, in about half a minute, a pungent heat, affecting firſt and princi-
pally the tongue, then the palate, and laſt of all the lips in a lower degree.
The heat continues more than fifteen minutes; the bitterneſs ſtill longer, pro-
voking a plentiful diſcharge of the ſaliva. It heats and irritates alſo the noſe,
creating an inclination to ſneezing without effecting it. Hence were we to
judge of the virtues we ſhould reckon it diaphoretic, cathartic, and nervine.
It certainly is diaphoretic, and may be called nervine; but not purgative, ſave
ſometimes accidentally. Eraſtus thinks that, were it not for its vis ſtupefaciens,
it would always prove cathartic. According to him therefore the narcotic vis
has no dependence on its ſenſible qualities. And this will appear the more
probable, if we conſider that ſome narcotics are acrid, others mild; ſome bit-
ter, others ſweet; ſome odoriferous, others not ſo; ſome purgative, others
aſtringent, &c. and yet all of them are anodyne, and almoſt equally narcotic
and virulent, if the doſe be proportioned to their ſtrength: and alſo that there
are cathartics, as acrid, bitter, and ſtrong-ſcented as Opium, and yet no ways
narcotic. We ought therefore to diſtinguiſh between the ſtimulating or narco-
tic qualities of Opium, at leaſt we may conceive of them as different. Hence
the controverſy whether it is heating or cooling may eaſily be determined.

2. In a pound (or ℥xij.) of Opium there are about five ounces of gummy,
four of reſinous, and three of feculent parts; as appears by the experiments

related in the *Eſſay*, p. 115. by which alſo it is evident that water diſſolves it as well as wine or vinegar, and better than rectified ſpirit; but proof ſpirits are its moſt complete menſtruum, diſſolving both the gummy and reſinous parts.

3. The gum has the taſte and ſmell of Opium, and the ſame effects. The roſin has no taſte, and ſmells muſty: but, diſſolved in alcohol vini, it taſtes of the Opium, and is anodyne and ſomniferous; but does not appear to have any worſe effects than the gum, or at leaſt not to be more virulently narcotic. Hence the narcotic virtue of Opium does not depend on its ſulphur, whether it be called craſſum, vaporoſum, rareſcibile admodum, or by any ſuch imaginary epithet. Vid. *Eſſ.* p. 116.

4. Though Opium is rather alcaleſcent than aceſcent, yet it cannot be called an alcali. See the experiments in proof of this, *Eſſ.* p. 119—122. From which it follows that the eſſential ſalt of Opium is ſomewhat ammoniacal; that Opium contains very little acid; and that it acts on chalybeats like vegetable aſtringents in ſome degree.

5. The moſt active principles of Opium are not volatile, but very fixed: for it keeps long; loſes nothing of value by drying: and little or nothing riſes from it, even though fermented in diſtillation. Hence old Opium is as good, but not better than new. Roaſting of Opium is uſeleſs; and aqua theriacalis is worth little.

6. By a chemical analyſis ℥xvj. of Opium yielded phlegmatis ſubacidi ʒj. ʒij, ſpiritus urinoſi ʒiv. ʒij, olei empyr. ʒij, ſalis vol. urin. ſicci circiter gr. iv. which, with 114 grains at moſt contained in the urinous ſpirit (diſcovered as in *Eſſ.* p. 125.) makes in all ſalis vol. ʒj. gr. lviij. So that opii gr. lxvj. contain or rather yield but gr. j. ſalis volatilis. And there remained carbonis ſpongioſi ℥vj. which makes the quantity ℥xiiiß. gr. iv. and therefore there were loſt ʒij. ʒiij, gr. lvj. The carbo, long calcined, was reduced to cinerum ℥ß. gr. xlix, from which boiling water extracted ʒj, gr. lviij; and there remained terræ ʒiij. gr. lviij, which by a ſecond calcination loſt about gr. vj, and yielded to water again ℈j; ſo that the terra chymica was reduced to ʒij. gr. xxv. There were ſome different appearances in the different analyſes; for which vid. *Eſſ.* p. 123—128. From this it appears the virtues of Opium do not depend on a volatile ſalt.

7. Opium acts on (at leaſt ſome) animals as it does on men, *i. e.* is innocent, hurtful, or poiſon to them, according to the doſe. For (α) A frog, put into water in which there was ſome Opium diſſolved, preſently appeared uneaſy; and next morning was dead, and much ſwelled. (β) A few drops of a ſolution of Opium, conveyed into a frog's ſtomach, killed it. See the phænomena, which are remarkably curious, *Eſſ.* p. 128—130. (γ) Opii ℥ß diſſolved in aquæ ʒiv, filtered and warm, was injected into the crural vein of a dog, but not all at once: the firſt fifteen drams had no effect obſervable; but after an hour ʒviij. more being thrown in, the dog was ſeized with convulſions, had a ſmall and frequent pulſe, and foamed at the mouth: but no ſigns of immediate death appearing for another hour, the remaining ʒix were injected (not ſlowly as the reſt were, but) as forcibly and quickly as could be; on which the pulſe became full and ſlow, and in about a minute the animal expired. Nothing very remarkable appeared on opening the dog. Vid. *Eſſ.*

p. 131. (♂) Opii ʒij, ſwallowed by a ſmaller dog, did not make him ſleep, but deprived him of the uſe of his limbs; ſo that he could neither eat nor drink for four days; after which he recovered. Vid. *Eſſ.* p. 132.

8. Opium, outwardly applied, is anodyne, diſcutient, and ſoporiferous; having almoſt the ſame effects as when taken inwardly. One of the inconveniences accompanying the immoderate application of Opium, mandragora, hyoſcyamus, for pains of the eyes, as obſerved by Galen, is a mydriaſis, of which ſee an inſtance in *R. H.* p. 680. Vid. *Eſſ.* p. 132. Hence Opium and other narcotics, ſometimes at leaſt, impair the tone of the muſcles, or cauſe a ſort of palſy about the part to which they are applied. Vid. *Eſſ.* p. 133.

9. Opium rather thickens than thins the blood and juices. See the proof, *Eſſ.* p. 134.

10. Habit, or cuſtomary uſe, makes that quantity of Opium ſafe, yea beneficial, which would otherwiſe be poiſon. Though ʒj. or ij. is but a moderate doſe to a Turk, yet a lady was killed by about twenty grains of it, with myrrhæ ʒij. Vid. *Eſſ.* p. 135.

11. The effects of Opium are very analogous to thoſe of fermented liquors and vinous ſpirits. Only ſpirituous liquors, outwardly applied, rather contract than relax the fibres. *Eſſ.* p. 136—138. And

12. Opium, taken inwardly, acts primarily on the ſtomach, on which action its virtues chiefly depend. I have often obſerved a violent teneſmus removed in a moment by a few drops laudani liquidi, vomiting ſtopt, pain eaſed, and ſleep procured the ſame way, and almoſt as ſoon. There are many inſtances in *Wepfer's cicuta aq.* of terrible ſymptoms, and death itſelf, cauſed by narcotics before they went out of the ſtomach, and without ſo much as inflaming it; or cauſing any obſervable alteration in it more than if it had been infuſed ſo long in warm water; far leſs vitiating the blood: as alſo of the ſame ſymptoms being removed, and death prevented by vomiting. A glaſs of new-drawn aq. menthæ ſimpl. threw a ſtrong man into epileptic fits; and aq. hyſſopi had the ſame effect on a woman not many years ſince. Vid. ſome *præcognita*, which might be here inſiſted on. *Eſſ.* p. 139.—I ſhall here only obſerve: 1. That pain cauſes, or is accompanied with, a contraction of the ſenſible fibres; and that ſleep is a ſort of palſy of the organs of ſenſation and voluntary motion. 2. That as the primary effects of a medicine have frequently ſeveral ſecondary ones, ſo the ſame ſimple ſometimes differently affects the ſame nerve, or, at leaſt, different nerves of the ſame part, ſo as to produce effects altogether independent of one another. This our taſte, in many inſtances, can diſcover; and the taſte of Opium, compared with that of other narcotics, evinces it to be the caſe here, *that is*, ſhews that the ſtimulating quality of Opium has very different effects from the narcotic quality. And 3. By comparing the effects of wholeſome aromatics with thoſe of virulent narcotics it will appear, that the ſtimulating or aromatic part of Opium is ſo intimately united to the narcotic, as in ſome meaſure to mitigate it, and render it more friendly to nature than the narcotics that want ſuch a quality are, though otherwiſe much weaker than Opium. Such are the hyoſcyamus, cicuta aquatica, ſolanum lethale, &c. Whilſt both ſtimulating and narcotic qualities contribute greatly to the virtues of this famous medicine.———From the whole I infer:

1. That the virtues of Opium do not depend on its acting on the brain, or on the blood, but on the nerves.—2. That it affects firſt and principally the nerves to which it is applied, next ſuch as are more immediately connected with them, then thoſe which ſerve for ſenſation and voluntary motion, and the whole nervous ſyſtem by conſent. See this fully proved by experiments, in *Dr. Whytt's Eſſay on vital and involuntary motions*, p. 370—376. As alſo *Phyſ. Eſſ.* vol. ii. p. . —3. That this influence on the nerves differently affects the ſenſorium commune, and the mind, according to its degree and the function of the nerves primarily (affected or) acted upon. *Eſſ.* p. 141. And—4. That the primary obſervable effect of the action or impreſſion of Opium on the nerves is the relaxation of their fibres. But that this effect is, properly ſpeaking, phyſical or mechanical, I cannot ſay: ſince I know not how cuſtom can prevent the phyſical action of one body on another; or how Opii ʒj can in time become a cordial to one, whom at firſt it would have infallibly deſtroyed. Perhaps the ſenſation communicated to the brain by the nerves primarily affected may be the immediate cauſe of this relaxation: but how this is performed I cannot pretend to explain, more than how the images painted on the retina cauſe viſion.

However, as the relaxation of the nerves, and conſequently of the moving fibres, prove Opium to be more than a palliative in many diſeaſes, ſo by this it is not difficult to account for its bad as well as good effects. For as by a moderate relaxation (accompanied with an agreeable titillation) it may prove anodyne, cordial, diaphoretic, hypnotic, &c. ſo by our relaxing it may cauſe ſtagnations, palſies, lethargies, deliriums, apoplexies, and death. See *Eſſays*, p. 142.

SECT. III.

Opium is given to gr. j. ij. iij; but to ſuch as commonly uſe it to a much greater quantity, *viz.* till it produces the deſired effect. The moſt uſual preparations are extractum, tinctura, laudanum liquidum Sydenhami, balſ. anodynum Bateanum, pilulæ pacificæ: and it is the baſis of the pilulæ e ſtyrace, diaſcordium, theriaca, and mithridatium.

It is an ingredient in the acetum theriacale, tinctura ſudorifica, decoctum diaſcordii, electuarium antidyſentericum, & theriaca Edinenſis. *Pharm. Edinb.* edit. 1744.

One grain of Opium is generally ſufficient for a doſe: and it is much ſafer to give too little than too much: for, its effects ſoon appearing, the defect may eaſily be ſupplied; but if too much is taken, the muſcles may become paralytic, ſo that nothing can be ſwallowed; and all we can do is to endeavour to provoke vomiting by tickling the throat with a feather &c. or by clyſters and cataplaſms of tobacco and ſuch like emetic applications; and at the ſame time rouze nature by ſtrong ſinapiſms &c. If thus the unfortunate patient is enabled to take any thing, after emptying the primæ viæ, diaphoretics, with vinegar, or ſuch kinds of acids, may complete the cure. I know not whether ever in theſe caſes a vomit was conveyed into the ſtomach by a proper inſtrument; which I think is ſomewhere mentioned by Boerhaave, or his commentator the very learned Van Swieten.

The

The tinctura Opii is omitted in the *Ph. Edin. edit.* 1744; as is alſo *Sydenham*'s liquid Laudanum. A tinctura Opii ſeu Laudanum liquidum, ſomewhat different from Sydenham's, is made to ſerve for both. The cloves and cinnamon are left out as uſeleſs, though the ſaffron is retained, and the menſtruum is half canary and half brandy. In the narrative prefixed to *Pemberton*'s *Lond. Diſp.* p. 81. is the following remark: "In the Laudanum, which, "for avoiding that fantaſtical name, is now called Tinctura Thebaica, the "ſaffron with which the tincture has been loaded is a uſeleſs ingredient; it can "have no other pretenſions to a place here than upon the antiquated and ridi- "culous conceit of its defending againſt ſome imaginary ill effects of the "Opium. Some ſpice, that may abate the ill odour of the Opium, will not "be uſeleſs." I prefer Sydenham's receipt to both; being aromatiſed by ſaffron, as well as by the cloves and cinnamon, which alſo correct both taſte and ſmell, and at the ſame time rather increaſe than diminiſh its anodyne and hypnotic virtues; as is evident from the nature of ſaffron, as well as from the long experience of the effects of this compoſition. Vid. *Pilulæ e ſtyrace Ph. Lond.* 121. which is as follows: "℞ ſtyr. cal. ℥ij, croci ℥j, Opii colati ʒv. Contunde "ſimul &c." The menſtruum in the tinct. Opii ſive Laudanum is changed; becauſe, when ſherry was uſed, there was after ſome time a precipitation, or ſeparation of ſomewhat from the ſolution. But what then? Is the medicine the worſe? By no means. Beſides, if there be of good ſherry p. 12. for Opii p. 1. the ſeparation is inconſiderable. I have it ſixteen years old, and as fine and good as ever: and need it be kept ſo long? I own it adds to the eſteem this compoſition really deſerves, that it bears ſo great a name as Sydenham's — And however fantaſtical Laudanum may appear, in my opinion *Tinctura Thebaica* is to the full as improper a name for a ſolution in wine of an Eaſt-Indian or Turky juice: much more being brought from Smyrna, Aleppo, Satalia, than from Egypt. Where Thebes in Egypt ſtood is not now known.

For the pil. pacificæ vulgò Matthæi. *offic.* vid. *Eſſ.* p. 145. It has now loſt the ſerpentaria, and doubled the caſtor: but it is neither better nor worſe than it was. In the *Ph. Ed. edit.* 1756, it is new modelled, ſapo tart. being omitted, as well as Capivi; and gum. ammon. and ſyr. of ſugar ſubſtituted in their place.—In the pil. e ſtyrace, edit. 1744, the balſ. Tolutanum & myrrha are omitted, and gum. tragacanthæ uſed for them: but, inſtead of pil. e ſtyrace, we have pil. ex olibano, into which myrrha is again received. Is the pill bettered thereby?—The balſ. anodynum Bateanum is alſo altered: but, whether made better or worſe, it differs from that of *Bates*, and ſo ſhould not retain his name.

SECT. IV.

POPPY HEADS partake of the virtues of Opium: of them is prepared the ſyrupus Papaveris albi, ſeu de meconio, vulgo diacodion. *offic.* The ſeeds are nouriſhing and antacrid, uſed only in emulſion, and but ſeldom. The flowers, though of the ſame nature, are reckoned more cooling, or rather weaker; and a ſyrup made with them is commended in the pleuriſy, and other inflammatory diſeaſes.—They are the produce of

Papaver rubrum, Papaver erraticum, Papaver rhœas. *offic.* Papaver erraticum majus; ῥοιὰς Dioſcoridi, Theophraſto, Plinio. *B. P.* 171. *T.* 238. Papa-

ver

ver erraticum rubrum campestre. *J. B.* iii. 395. Papaver erraticum. *Dod.* 447. Papaver rhœas. *Lob.* 143. *Ger.* 371. *R. H.* 855. Papaver erraticum rhœas sive sylvestre, *Park.* 367. Papaver rhœas. *Mer. pin.* 90. Papaver erraticum majus seu ῥοιας Dioscoridis, Theophrasti, & Plin. *H. Ox.* ii. 277. Papaver laciniato folio, capitulo breviore, glabro, annuum rhœas dictum. *R. Syn.* 308. Papaver foliis pinnatifidis, hispidis, fructu subrotundo. *H. Cliff.* 201. Red Poppy, or Corn-Rose.

This and many varieties of it, as well as the varieties of the Garden Poppies, have all the same taste and smell, belong to the same genus, are all lactescent; and the milky juice inspissates a real Opium. The strength therefore of the syrups is in proportion to the milk the heads and leaves contain; but how much Opium is contained in Pap. albi capitum ℥xiv, modicè siccatorum; whence syr. ℔viij. *circiter:* or in Papav. rhœad. florum ℔j. recentium, whence *about* syrupi ℔iv. are got, I cannot determine; and consequently know not exactly what proportion the strength of these syrups bear to one another, or to that of Opium. Sydenham makes diacod. ℥j. as strong as, or equivalent to, his Laud. liquidi gut. xvj. I doubt of its being near so strong. However there is no danger in giving ℥ij. of either of the syrups. N. B. It ought not to be *modicè siccatorum*; for this leaves such a latitude, that the syrup may be much stronger or weaker according to the degree of exiccation: neither need *mediocriter maturorum* have been added. The seeds, contributing nothing of consequence to the syrup, should also have been taken out.

"The flowers of the Red Poppy are of a cooling anodyne nature, in some "measure hypnotic . . . and are a noted remedy against surfeits, especially the "infusion of them in brandy, or the tinctura Papaveris officinarum." *Miller's Bot.* 331. A tinctura Papaveris composita, *Ph. Lond.* edit. 1720. was thus prepared: "℞ Fl. Papav. errat. ℔ij, nucis moschatæ incisæ ʒiij, sacchari albi "℥ij, sp. vini Gallici ℔iv. Extrahatur leni calore tinctura." But this is thrown out of the *New Lond. Disp.* N. B. The preparation of the two syrups of Poppies are accurately described in this *New Pharm. Lond.* and must be vastly stronger than ours. Vid. p. 101. and *Schroder*, p. 640—642.

LECTURE LXXVI.

SANGUIS DRACONIS.

SECT. I.

SANGUIS Draconis, *offic.* Sanguis Draconis officinarum. *B. P.* 499. Sanguis Draconis. *Matth.* p. 934. Mon. *Clus. Exot.* 330. *J. B.* i. 402. *R. H.* 1598. "Sanguis Draconis. *off.* κιννάβαρις Dioscoridis, Αἷμα δράκοντος "Græcorum recentiorum. Alachnen Arabum." *Geoff.* ii. 557. At "Cin-"nabarin quidam αἷμα δράκοντος esse existimaverunt," ait *Dioscorides*, l. 5. c. 109. p. 367. Dragons Blood—is a solid, brittle, resinous substance, in drops or masses of a dark red colour, when powdered of a bright crimson; without taste or smell.

"We

"We have three ſorts of Dragons Blood to be met with in the ſhops: "1. of a coarſe dull colour, made up in lumps and cakes; when powdered "of a little better colour than bole Armenick. The 2. is alſo in lumps, of a "pure red colour, almoſt as fine as the drops; though it has fragments "of leaves and the like ſtuff among it. The 3. is that which is in drops, "wrapt up in pieces of palm-leaves, of a pure bright crimſon colour when "powdered, but appearing blackiſh on the outſide before it is beat to pow-"der." *Miller's Bot.* 389. "The beſt and pureſt ſort is brought from the "Eaſt-Indies, in oval drops, wrapt up in flags; or in large maſſes, which "are evidently compoſed of ſmaller tears. The writers on the *M. M.* have, "in general, given the preference to the firſt; but we have ſeen them both "of equal goodneſs." *Lewis's Pharm.* p. 59. "The Dutch and Engliſh "bring it from the Indies, it comes alſo from the Levant, by Aleppo. It is "of three ſorts; and there are annually imported to Marſeilles of that *en larmes* "between fifty to ſixty pounds; *du fin*, from one to two quintals; and as "much *du moyen*. The firſt is valued from ſeven to eight livres; the ſecond "from four to five, and the third from thirty to forty ſols the pound weight." *Sav. Dict.* iii. 559.

It is ſaid to come from both the Indies, Levant, Madagaſcar, and the Canaries; and to be got from very different plants, of which the following is one:

Draco arbor. *Cluſ. Hiſt.* p. 1. *B. P.* 505. *Lob.* 639. *J. B.* i. 402. *Ger.* 1523. *Park.* 1531, 1598. Palma, prunifera, foliis yuccæ; fructu in racemis congeſtis, ceraſiformi, duro, cinereo, piſi magnitudine; cujus lachryma Sanguis Draconis eſt dicta. *H. Amſtel.* in 8vo. p. 261. *Sloani Cat. Jam.* 179. *Hiſt.* i. 20. Palma, foliis longiſſimis, pendulis, abſque ullo pedunculo, ex caudice glabro enatis. *J. B.* ii. 169. The Dragon-tree.—This grows in the Canaries. "In "inſulæ Maderæ ſepibus, prope urbem Funchall collegi." *Cat. Jam.* 179. *Dale* has alſo a Dragons-blood cane, p. 266; another Dragons-blood tree, p. 272. of the palm kind; and one called Angſana, p. 337. on which he ſays, "Unde non poſſum non obſervare, quod botanices auctores quænam arbor "ſit, valde incerti ſint, & magna obſcuritate ac confuſione laborent, aut di-"verſas arbores eſſe quæ hoc gummi producant." *Pharmacolog.* 338.

The Dragons-blood moſt common in our ſhops, in roundiſh or longiſh lumps, of an obſcure dirty-red colour, is reckoned factitious, and ſuch as ought not to be uſed inwardly. The Dutch are ſaid to put off gum ſenegal, coloured with Braſil, for Dragons-blood. vid. *J. B.*

"Milton vocant Græci minium, quidam cinnabarin: unde natus error In-"dico cinnabaris nomine. Sic enim appellant illi Saniem Draconis eliſi ele-"phantorum morientium pondere, permiſto utriuſque animalis ſanguine, ut "diximus." *Plin.* l. 33. c. 7. vid. *Monard. Cluſ. Exot.* 330. That this is the Cinnabari Dioſcoridis I cannot aſſert.

SECT. II.

It is called aſtringent; and is commended internally in fluxes and hæmorrhages, &c. and externally for ſpungy gums, looſe teeth, &c. But as there

is

is reaſon to doubt of its ſtipticity, I can affirm nothing concerning its virtues. Perhaps it may be called antiſeptic, if genuine; and diuretic: *fortè purgat.*

" Sunt qui Dioſcoridis cinnabarim eſſe velint. *Vires.* Refrigerat (aliis caliditate & frigiditate temperatus eſt) exiccat ſtrenuè, aſtringit, repellit. *Uſus* " ejus eſt *præcipuus* extrinſecus in exiccandis catarrhis (impoſitus capiti) in " hæmorrhagia ſiſtenda, vulneribus glutinandis, dentibus laxis ſtabiliendis. " *N.* Umbilico impoſitus quoque dyſenteriæ prodeſſe dicitur. *Præpar.* nulla " inde proſtant; depurari tamen poteſt, ſi in aqua decoquatur, a fæcibus decantetur, & denuo inſpiſſetur." *Schrod.* 741. " Solvitur quidem in aqua, " quam lacteam quaſi reddit, ſed ſine mixtione, quippe refrigerata aqua ſubſidet iterum, parietibuſque vaſis adhæreſcit." *Ibidem.*

The moſt genuine Dragons-blood that I have ſeen has neither taſte nor ſmell. " Pulchros S. D. grumos aſſervamus, glebis thuris æquales, rotundos ut plurimum; alios inequales, foris ferrugineos, fractos pellucidos, coccineos, " dentibus fragiles, ſaporis expertes, ſalivam ſtatim & affatim rubore tingentes." *J. B.* i. 402. " Non exiſtimamus frigidum & ſiccum eſſe 3. gradu " ut Lonic. ſcribit: nullam etiam inſignem vim hactenus animadvertimus in " legitimo ad reprimendos fluores ſanguinis. In adulterino ob admixta adſtringentia majorem credimus." *Ibid.* p. 405. " Eſt ſubſtantia gummoſa " & reſinoſa, rubicunda. . . . Saporis adſtringentis & viſcoſi." *Herm. Cyn.* p. 719. " Reſina eſt obſcura, rubra. . . Saporis reſinoſi & adſtringentis." " *Dale.* p. 272. " Eſt ſubſtantia gummeo-reſinoſa. . . Saporis auſteri & viſ- " coſi." *Nucl. Belg.* 255. " Subſtantia eſt reſinoſa . . . Saporis expers, ſicut " & odoris, niſi cum incenditur, tum enim odorem exhalat ad ſtyracis liquidæ " odorem proximè accedentem." *Geoff.* ii. 557. " Sanguis D. ſp. vini infuſus, " ſanguineum colorem emittit elegantiſſimum; cum aqua autem, oleo, vel alio " liquore vix aliquem." *Hoffm.* in *Schrod.* p. 529. " In aqua & oleo difficulter " diſſolubilis eſt." *Nucl. Belg.* 255. It melts, flames briſkly, and conſumes in the fire, but not intirely, leaving a little earthy aſhes behind it: its ſmoke ſmells partly ſweet, and partly fetid, and provokes coughing; and ſeems not to be (at leaſt much of what is ſold for it) a pure roſin, but ſomewhat gummy. " Sanguis D. genuinus aqua non ſolvitur, ſed ſpiritu vini & oleoſis ſubſtantiis. " Fumus, qui ex eo incenſo exhalat, ſubacidus eſt, qualis ex benzoino eleva- " tur. Reſina eſt compoſita ex oleo craſſo, copioſo, & acido ſale ſimul permiſtis: parum vero partium volatilium oleoſarum continet, ut ex eo con- " cludi poteſt quod odoris & ſaporis ſit expers. Vi pollet incraſſante, exſic- " cante, & adſtringente; & in dyſenteria, hæmorrhagiis, & vehementioribus " fluxibus, ac ulceribus internis, utiliter adhibetur internè ad ʒß. ad ʒj. Ex- " ternè ulcera exſiccat, vulnera glutinat, commotos dentes firmat, & gingivas " roborat." *Geoff.* ii. 564. who thus gives its principia, without analyſing; and virtues but badly founded on its ſenſible qualities. I diſcovered neither acid nor the ſcent of ſtyrax, nor benzoin, in the ſmoke; but ſomething like the ſmell of honey, accompanied with the fumed ſcent of ſtorax liquida. — 2. We are not certain what tree it comes from; or whether we have any genuine; or it be a natural tear: nor do we know whether what we have be of the ſame nature (about which authors differ ſo much) or not. And—3. Its aſtringency, &c. ſeems to have no other foundation but the opinion of its being the cinnabari antiquorum: and there will ſtill appear leſs reaſon for it

if it become very acrid when diſſolved in ſpirit or oil, as has of late been aſſerted. " It is not at all acted upon by watry liquors, but totally diſſolves " in ſpirit of wine, gives a red colour and hot pungent taſte to oils, &c." *Lewis's Diſp.* p. 59. vid. *Pharm reform.*—" When diſſolved it diſcovers ſome " degree of warmth and pungency." *New Diſp.* p. 198.

SECT. III.

The doſe is a ʒß. ad ʒj. according to *Herman* and *Geoffroy*. I am not for giving it at all till we know ſomewhat more about it. It is in the pulvis ſtypticus, electuarium antidyſentericum, balſamum Locatelli, & emplaſtrum defenſivum *Ph. Edinb.* and in the emplaſtrum roborans *Ph. Lond.*

SARCOCOLLA.

SECT. I.

Sarcocolla, *offic.* Sarcocolla. *B. P.* 498. *Park.* 1544. *R. H.* 1847. Sarcocolla officinarum. *J. B.* i. 2, 308. Sarcocol—is a light, ſpongy, friable, reſinous gum, in ſmall grains, of a yellowiſh colour; of a bitter, nauſeous, ſweetiſh taſte; and no ſmell.

" It is ſaid to come from Perſia; but we have no knowledge of the tree " that produces it." *Mill. Bot.* 394. Some make it a prickly leguminous flowered and codded tree; others, which is more probable, a (prickly) tithymalus, becauſe " Admiſta reperiuntur aliquando folia ex candido flaveſcentia, " thymali myrſuntis folia ſicca egregie referentia." *J. B.* " Ex Perſia ad nos " transfertur." *Dale* 345. " Ex Perſia & Arabia affertur." *Geoff.* ii. 646. " Some ſay the tree grows in Arabia Deſerta or Petræa; others in Perſia: the " gum is taxed as a commodity from the Levant. *Sav. Dict.* ii. 1483. " Sar- " cocole, the gum of a tree uſed in medicine, comes to Marſeilles from Perſia " by Aleppo, from two to three quintals per annum." *Sav. Dict.* iii. 559. An Sarcocolla antiquorum? Probabiliter.

" Sarcocolla lachryma eſt arboris in Perſide naſentis, thuri tenui ſimilis, " ſubfulva, guſtu amariuſcula. Vim habet vulnera glutinandi, & oculorum " fluxiones inhibendi. Inſeritur & emplaſtris. Cæterum admixto gummi " adulteratur." *Dioſcor.* l. 3. c. 99. totum. p. 217. " Sic & Galeno 8. " Simpl. Lachryma arboris Perſicæ. *Plinio*, l. 13. c. 10. Fit & ex Sarco- " colla, ita vocatur arbor, gummi utiliſſimum, ſimile pollini thuris, & ideo " candidum quam ruſſum melius: &, l. 24. c. 14, ſunt qui Sarcocollam ſpinæ " lachrymam putant, pollini thuris ſimilem, cum quadam acrimonia dulcem." *B. P.*

SECT. II.

It is probably ſuch a purgative as is the cataputia; and outwardly detergent, and attrahent or epiſpaſtic; and ſo may be of uſe in foul ulcers, carious bones,

and fixed pains; called a phlegmagogue, and alſo aſtringent; and commended for coughs, aſthmas, ſciaticæ: but it is now uſed almoſt only for ſore eyes. In my opinion the *M. M.* might very well do without it.

" Calfacit & ſiccat 1. aſtringit, conſolidat, glutinat, coquit, maturat. " *Uſus præcipui* in vulneribus extergendis, conſolidandis, cicatrice obducendis, " &c. Mirifice prodeſt & in oculorum fluxionibus, albugine, nubeculis " (maceratur in lacte aſinino vel humano diebus quinque, poſtea cum aqua roſa- " rum mixta, ciliis imponitur, addita ſi libet tantillo ſacchari) in hæmorrha- " gia narium (anacollematis immiſcetur). *N.* Sunt qui propinant purgandi " gratia, craſſoſque & viſcoſos humores, ex partibus diſſitis, e. g. ab articu- " lis, pulmonibus illa retrahi ſcriptitant. *Doſis* ʒj. corrigenda eſt ut ſagape- " num. *Præp.* Pilulæ de Sarcocolla compos." *Schrod.* 741..

1. It is a ſubviſcid, bitteriſh and nauſeous reſinous gum, of a tithymalus probably. " Saporis amari, cum quadam ingrata dulcedine obſcura: ſub " dente lenteſcit, & candelæ admota primum bullat, poſtmodum in claram " flammam exardet." *J. B.* " Sapore amara, dulcedinemque (glycyrrhizæ " æmulam) poſt ſe relinquente: ſubſtantiæ eſt viſcoſæ, glutinoſæ, &c." *Schroder.* " Eſt collecta ex tithymalo Perſico, ſpinoſo, Sarcocollifero, ſaporis " amaricantis, cum obſcura quadam dulcedine; odoris dum incenditur ingrati." *Herm. Cyn.* 701. " Saporis eſt amaricantis & lenti, obſcura quadam dulcedine." *Dale* 345. " It is of a viſcid and ſomewhat bitteriſh taſte, with a ſweetiſh reliſh." *Mill. Bot.* " Saporis eſt ſubacris, amari, cum quadam ingrata dulcedine ob- " ſcura, nauſeam provocantis." *Geoff.* ii. 646; who adds, in aqueo liquore diſſolvitur: and *Lewis* (*Pharm.* p. 60.) ſays, It is of a bitteriſh and nauſeous ſweet taſte, and diſſolves in a good meaſure in water. Hence it appears to be really ſomewhat purgative, though the Greeks took no notice of this quality. But what claim it has to aſtringency I ſee not: neither what ſervice it can do in diſeaſes of the eyes, if it be not by an irritating detergency. — 2. " Analyſi " chymica ex Sarcocolla ℔ij. prodierunt humorum ℥xj; olei ℥vij. ʒviß. Car- " bonis fuere ℥vij. ʒvj. gr. lxvi: unde cinerum ʒvij. gr. liv; ac inde ſalis fixi " ſalſi ʒj. gr. ix. & jactura fuit ℥v. ʒij. gr. xlij." *Geoff.* ii. 646; who hence makes it a compoſitum gummoſum ſeu ſaponaceum, aliquantiſper reſinoſum; adding: " Vulnera abſtergit, conſolidat, & cicatrice obducit." — 3. The Arabians themſelves ſeem not to have had a very good opinion of it. " Pur- " gat pituitam crudam, & humores alios craſſos, præcipuè a cerebro, nervis, " juncturis, ut iſchio, pulmonibus. Ob id ſenibus pituitoſis, aſthmaticis, " tuſſientibus prodeſt, ſed calvitium accerſit. . . . Ventriculo calido & bilioſo " eſt nocentiſſima Sarcocolla ob id vitanda picrocholis eſt; aliis datur a ʒj. ad " ʒij." *Meſue, Simpl.* l. 2. c. 18. p. 69. " Facultatis purgatoriæ non me- " minere Græci, Meſue, & Avicenna; nec laudant nec vituperant; Serapio " pro cathæretico habet, & pro p. 1. Sarcocollæ, accipit olei, p. x. ac ſi " euphorbium foret. Scribunt autem purgare pituitam craſſam, & quidem " a remotis partibus, veluti oculis, cum quibus habet tantam affinitatem, ut " purgandi gratia in illis data, exulceret. Miſera affinitas! quam hoſtibus " optem. Meſue dat in ſubſtantia a ʒj. ad ʒij. quod ego ne in pilulis quidem " audeam, quantumvis bene correctæ videantur. . . Abeat Sarcocolla, cum " pilulis ſuis in maximam malam rem." *Hoffman*, p. 66 and 67.

Doſis

Doſis ʒj. Schrod. ad ʒij. Meſue. " Serapio extus comedere carnes ulce-
" rum; intus exulcerare inteſtina & inducere calvitiem aſſerit. Nihilominus
" proponit internum illius uſum a ʒj. ad ʒiij. modo ſicut euphorbium oleo
" nucum vel amygdalino temperetur." *Geoff.* ii. 647. It is an ingredient in the trochiſci albi rhaſis *Ph. Edin.* 1744; which are compoſed of ceruſſa, Sarcocolla, tragacantha, amylum, & camphora; an odd hotchpotch! The pulvis è ceruſſa compoſitus *Ph. Lond.* conſiſts of ceruſſ. ʒv, Sarcocol ʒiß, tragac. ʒß, powdered together. Neither of them are worth much.

SCAMMONIUM.

SECT. I.

Scammonium, *offic.* Scammonium, *B. P.* 495. Scammonium, Succus Scammoniæ denſatus. *J. B.* ii. 164, &c. Scammony.—This is a light, friable, greyiſh-black reſinous gum, or rather gummy roſin, brought from the Levant in large ſomewhat ſhining lumps, of a whitiſh aſh colour when powdered, and white when wetted; of a penetrating ſubacrid taſte, and diſagreeable ſmell, while recent. It is the inſpiſſated or concrete juice of the root of the Scammonia Syriaca, *P. B.* 294. *R. H.* 722. Scammonia Syriaca, flore majore convolvuli, *J. B.* ii. 163. Scammonia Syriaca legitima, *Park.* 164. Scammonium, *Dod.* 391. Scammonium Syriacum, *Ger.* 866. Scammonium Syriacum, Antiochenum, *Lob. Adv.* 272. Convolvulus, Syriacus, & Scammonia Syriaca, *H. Ox.* ii. 12. *T.* 83. Convolvulus foliis ſagittatis, minoribus poſticè truncatis. *H. Cliff.* 66; where it ſtands as a varietas C. majoris albi, *P. B.* " Differt a vulgari, ait Linnæus, foliis minoribus, ſtructuram aliam
" differentem non obſervavimus." *H. Cliff.* p. 67. It grows in Candy, Syria, &c.

The beſt Scammony comes from Aleppo. That from Smyrna is very acrid and burns the mouth. Vid. *Mr. Bolduc, M. Acad.* an. 1702. p. 248. " The
" beſt comes from Aleppo; that which comes from Smyrna being fuller of
" droſs and ſand." *Mill. Bot.* 401. Whether there is mixed with that from Smyrna the juice of ſome ſpurge, or it is got from a different ſpecies, I know not.

" Scammonia ramos ab una radice multos profert, ternum cubitorum, pin-
" gues & quadantenus hirſutos: foliis itidem hirſutis helxinæ aut hederæ ſimi-
" libus, ſed mollioribus ac triangulis: floribus albis, rotundis in modum cala-
" thorum concavis & graveolentibus; radice prælonga, craſſitudine brachiali,
" candida & gravis odoris, lacteique ſucci plena; qui quidem legitur hunc in
" modum: capite exempto radix ita cultro incavatur, ut excavatio ſenſim a
" latiore orbe in acutum deſinat, proindeque in id cavum confluit ſuccus, qui
" conchis demum excipitur. Alii poſtquam ſcrobes in terra concamerato ſinu
" effoderunt, juglandum folia inſternunt, in quæ radicis inciſæ ſuccus diffun-
" datur, eumque inibi ſiccatum tandem auferunt. Bonitate præſtat, qui pel-
" lucidus eſt ac levis, rarus & colore glutini taurino ſimilis, rimulis fiſtuliſve
" tenuibus, atque fungoſus, qualis ſcil. ex Myſiæ regione Aſiæ deportatur. . .
" Attendendum eſt ſi non vehementer linguam excalfaciat exuratve; id quod

" & miſti tithymali ſucci argumentum eſt. Syriacus autem & Judaicus deter-
" rimi habentur, graves, denſi, ervi farina, & tithymalo adulterati." *Dioſcor.* l. iv. c. 171. p. 311. This therefore differs from our Scammonia; but is probably only a variety, of which *T.* makes mention: ſee his *Voy. Let.* 10. p. 159. and *Geoff.* ii. 667. I ſhall only add, that the quantity of roſin in Scammony ſufficiently proves it to be the proper juice, not that got by expreſſion from the plant.

Scammonium vocatur à σκαμμα foſſa, à σκαπτω fodio.—Scammony is good four years, according to *Dod.* but *Meſue* ſays it keeps good twenty years; others ſay forty. This juice was much uſed by Hippocrates; as was ſometimes alſo the root of the plant.

SECT. II.

Scammony is a ſtrong and efficacious purgative, agreeing much with jalap, or rather reſina jalapæ; called a phlegmagogue and cholagogue; and much uſed in the ſtronger cathartic compoſitions, though not ſo much alone.

" Expurgat valide humores bilioſos acres, ſeroſos, adeoque creberrimi uſus
" eſt non modo per ſe, ſed & cum aliis permiſtum. N. Cum magnæ ſit acri-
" moniæ, intenſæque caliditatis & ſiccitatis, infenſæ malignitatis, mordacis
" flatulentiæ, exceſſivæ attractionis, adeoque aptum natum quod inteſtina ero-
" dat, viſcera cor, hepar, &c. conturbet, ventriculum flatibus mordacibus
" laceſſat. Vi ſua calfactoria ac exiccatoria (quas 3. gr. obtinet) inflammet,
" & conſequenter febres producat. Vi attractoria hypercatharſes introducat
" Correctione opus habet: hanc alii aliter inſtituunt. Hinc *Præpar.* 1. Scam.
" correctum per cydonium, *i. e.* diagridium. 2. Scam. defœcatum per ſuc-
" cum citoniorum. 3. Extractum per ſp. vini magiſterium ſeu reſina. Doſis
" a ℈ß. ad gr. xv. 4. Extract. diagridii aromaticum. 5. Extractum Scam-
" mon. glycyrrhizatum. 6. Elyxir Scam. Crollianum. 7. Scam. vitriolatum.
" 8. Scam. ſulphuratum. 9. Scam. roſatum. 10. Infuſum Scammonii.
" 11. Diacydonium lucidum Scammoniatum. 12. Gelatina cydoniorum laxa-
" tiva, &c." *Schrod.* p. 785—788.

1. It appears almoſt inſipid at firſt, but then ſubacrid, or rather penetrating, affecting more the root than tip of the tongue, and provoking the ſaliva plentifully; and ſmells ſomewhat ſtrong and diſagreeably: yet it is far from being ſo acrid as ſome make it. " Eſt odore nauſeoſo, ſapore amaricante, & medio-
" criter acri." *J. B.* " Guſtu quidem nulla in eo caloris vehementia depre-
" henditur. Cuicunque ſiquidem liquori aut rei permiſceatur, nullam ei vel
" amaritudinem, vel acrimoniam, aut alium ingratum ſaporem communicat;
" quamobrem nec inter calidiſſima, ut pleriſque videtur, ſed inter moderatius
" calida & ſicca habendum." *Dod.* (*accurate*). " Saporis acris, nauſeoſi; odo-
" ris viroſi." *Herm. Cyn.* p. 686. " Saporis eſt ſubamari, & nauſeoſi acris;
" non tamen mordacis; odoris viroſi." *Nucl. Belg.* 261. " Of a pretty ſtrong
" ſmell, but of no very hot taſte." *Mill. Bot.* 401. " Saporis amaricantis,
" cum quadam acrimonia, & odoris virulenti." *Geoff.* ii. 666. — 2. It is the produce of a ſpecies convolvuli; as alſo are jalapa, mechoacana, turbith, ſoldanella; " Smilax lævis. off. Convolvulus major albus, *B. P.* 294. . . Hoff-
" manno

" manno Scammonium Germanicum appellatur. Helxine ciſſampelos, *offic.* " Convolvulus minor arvenſis." *B. P.* 294. &c. which are purgative. Vide *Dale* 183. The virtues of all theſe cathartics are lodged in their milky juice, or the therein contained roſin; of which the Scammony containing the far greateſt proportion, it muſt needs be the ſtrongeſt, being the ſuccus proprius; whereas the reſt are the intire ſubſtance of the roots, or herbs. Hence—3. Scammonii ℥j. contains at leaſt reſinæ ʒvj. mucilaginis vel gummi ʒj. vel ʒiß. & fœcum ʒj. vel ʒß. according to *Bolduc*, *Mem. Acad.* 1702. vid. p. 248, &c. " I got ʒiij. of roſin from ℥iv. of Scammonii by means of ſp. vini rectif. " An extract made with reſiduum was more diuretic than purgative. From " Scam. ℥iv. with acetum deſtillatum, I got extracti ℥ij. ʒij. and from the " reſiduum with ſp. vini, reſinæ ℥j. ʒij. The extract purges gently, given " to gr. xij. or xv." Thus *Bold.* l. c. " Ex Scammonii ʒvj. reſinæ ʒv. " ope ſp. vini extrahuntur. Verum tota ejus ſubſtantia aqueis menſtruis ſol- " vitur; ſed lacteo colore tingitur ſolutio, ob reſinoſas partes ſalinis & aqueis " intermixtas." *Geoff.* ii. 669. " Sed reſina minus purgat, quam Scammo- " nium eadem doſi exhibitum, attamen inteſtina vehementius irritat, & ſæpe " inflammat." *Ibid.* p. 675. Scammony turning into milk in water ſhews it contains ſomewhat of a menſtruum for its own roſin, and conſequently it eaſier diſſolves in the ſtomach than the pure roſin will. Hence it more certainly purges than its roſin; but I cannot ſay it purges more than the roſin in ſtomachs that can diſſolve it. " Rectified ſpirit diſſolves ℥v. out of ſix (of " Scammony); the remainder is a mucilaginous ſubſtance mixed with droſs: " proof ſpirit totally diſſolves it, the impurities only being left." *New Diſp.* p. 202. " The chymical analyſis teaches only that the principles of Scam- " mony are not eaſily ſeparated, and that it contains little acid ſpirit, a little " urinous, but much more of oily parts, and a little fixed ſalt." *Bolduc*, l. c. " Analyſi chymica Scammonium fundit nonnihil liquoris acris, tenuis, qui " primus in diſtillatione elevatur, nec acidi, nec alcali notas præbet: deinde " liquoris acidi portionem non mediocrem; humoris tum acidi, tum urinoſi " aliquantulum; tandem multum olei craſſi & empyreumatici, modicum terræ " & ſalis fixi. Ex his exſurgit compoſitum gummoſum & reſinoſum." *Geoff.* ii. 669. Did either of theſe authors analyſe it? — 4. The ancients commend it outwardly for hard tumors, itch, ſcurf, fixed pains, &c. and inwardly gave it in large doſes as a purgative. *Dioſcorides* takes no notice of its bad qualities: but if we depend upon what *Oribaſius*, (*Collect.* l. 7. p. 328. E.) *Aetius*, (*Serm.* 3. c. 25. p. 124.) *Meſue*, (*Simpl.* l. 2. c. i. *fol.* 47. *B.* &c.) and other Arabians ſay of its noxæ, we ſhall never uſe it. " Ego nunquam in praxi mea in uſu " habui, nec in poſterum habebo; me ſemper ab iſtiuſmodi venenis colliqua- " tivis abſtinens." *Hoffm. in Schrod.* p. 573. Others commend it out of meaſure. It certainly is, as *Boerh. Lib. de M. M.* has it, purgans forte, nec (multum irritans, vixque I add) inflammans, p. 82. I reckon it milder than the reſina jalapæ. *Mr. Geoffroy* has near fourteen pages on Scammony. Sed nihil explicat. In a word, it is milder; and ſo ſafer than reſina jalapæ. The ancients uſed the radix, as well as the juice, and in ſome caſes it would do better. " Scammonium etiamſi inter cholagoga ſit relatum, tamen uſus " comprobavit eſſe catholicum, polychreſtum, & in omnibus morbis condu- " cere, ubi purgatione opus eſt." *Herm. Cyn.* 686.

SECT.

SECT. III.

It may be given intire to ℈j; its roſin to gr. xv. But Scam. gr. xvj. & reſina ejus gr. xij. is generally a ſufficient doſe for any man. It needs no corrector if ſufficiently divided, and rightly doſed.—It is an ingredient in the pulvis Varvicenſis, vulgò Cornachini, pulvis diaſennæ, pilulæ cocciæ, P. de duobus, P. ecphraticæ, & P. rudii. The *Ph. Lond.* has a pulvis e Scammonio compoſitus, pulvis e ſena compoſitus, electarium e Scammonio, extractum catharticum, pilulæ ex colocynthide ſimpliciores, & P. ex coloc. cum aloe; in which it is uſed.

" Succus ʒj. aut ob, iv. pondere hauſtus, ex aqua aut mulſa, bilem pituitamque ἄνω purgat. Solvendæ alvi gratia ob. ij. cum ſeſamo aliove ſemine, ſumpſiſſe ſat eſt. Efficacioris etiam purgationis causâ dantur ſucci ob. iij. cum hellebori nigri ob. ij, & aloes ʒj." *Dioſcor.* l. 4. c. 171. p. 312. " *Plin.* l. 26. c. 8. dat ob. iv. ut & Paulus Aëtius & Actuarius ℈ij. exhibent." *Hoffman*, p. 70. § 21. " Datur per ſe a gr. v. ad xij." *Meſue.* l. c. " Meſue dat a gr. v. ad xv. Bod. a Stapel ad gr. xxv. Videlius ad ℈j. Ego vero a gr. ij. vel iij. ad gr. x. vel xij. ad ſummum Scammonium electum exhibeo." *Geoff.* ii. 672. " Doſis gr. vj. xij. ℈j." *Ph. Bat.* " Doſis Scammonii ad gr. vj. Heurn. ad gr. x. Fernel. gr. viii. Curt. gr. xij. Rondel. gr. xv. Sennert. ad gr. xvj. Fulgin. ad ℈j. Morello." *S. Paul.* p. 604. " Datur in ſubſtantia & extracto a ℈ß. ad gr. xv. robuſtiſſimis ad ℈j. Reſina a gr. vij. ad xv. in vitello ovi." *Herm. Cyn.* 686.

Pulvis *Cornachini*, rather pulvis *Varvicenſis*, was communicated to *Marcus Cornachinus*, *P. M.* at *Piſa*, by *Robert Dudley*, *earl of Warwick:* and he, being convinced of its wonderful effects, by the cures it performed on the ſaid earl, his counteſs, and children, &c. in very frequent diſeaſes, notwithſtanding his former prejudices, wrote a book, called " *Methodus qua omnes humani corporis affectiones, ab humoribus copia aut qualitate peccantibus, genitæ, tuto, cito, & jucunde (chymice & Galenice) curantur,*" addreſſed to the ſaid earl, to whom, as he owns, he owed the medicine *an.* 1620. It was ſeveral times printed: I have it annexed to *Jo. Hartmanni Praxis chymiatrica*, *Genevæ* 1682, in 8vo. The proportions were Scammonii p. iv, antimonii p. iij, tartari p. ij; but variable according to circumſtances. It is now commonly prepared with equal parts of each: only the *Ph. Lond.* makes it of Scam. p. iv. and C.C.C. *ppt.* p. iii. Vid. *Antimon. Diaphor.* ſupra, vol. i. p. 313.

LECTURE LXXVII.

SUCCI DENSATI.

ELATERIUM. *Vide* p. 421. vol. I.

MANNA.

SECT. I.

Manna, Manna Calabrina, *offic.* Manna officinarum, *B. P.* 497. Manna Calabrina, *Park.* 1591. Manna Calabrina fraxini & orni. *J. B.* i. 2, 192.

Manna vulgaris officinarum, *R. H.* 1703. Common or Calabrian Manna—is the concrete juice of a tree, not very hard, of a whitiſh colour, or pale yellow; of a ſweet but ſomewhat nauſeous taſte, and ſoft honey ſmell. It is ſaid to flow ſpontaneouſly, and alſo from inciſions made in the

Fraxinus rotundiore folio, *B. P.* 416. *J. B.* i. 2, 177. *T.* 577. *R. H.* 1703. Fraxinus Alepenſis. *H. L.* 261. Manifera arbor, *offic.* The round-leaved aſh, *Dale* 332. The Manna-aſh *vulgo.* It grows in Italy, Sicily, &c. "Fraxino "excelſiori minor & humilior eſt, foliiſque rotundioribus. Tranſmiſit D. "Watſius ex Anglia." *H. L.*—as alſo from the

Fraxinus humilior ſive altera Theophraſti, minore & tenuiore folio, *B. P.* 416. *T.* 577. Fraxinus tenuiori & minore folio, *J. B.* i. 2, 177. *R. H.* 1703. Ornus, *Lugd.* 83. Ornus vulgaris fructifera, *Pont. Anth.* 300. Fraxinus floribus completis Hermaphroditus, *H. Cliff.* 470. Cui, F. floribus completis mas eſt Fraxinus florifera, botryoides, *H. Bleſ.* 265. *T.* 577. *R. H.* 1704. Ornus vulgaris ſterilis, *Pont. Anth.* 300. This *Mr. Ray* (and ſo *Mr. Geoff.*) takes to be a variety of the common aſh: but they differ ſpecifically even in *Linnæus*'s opinion.

"Notandum inſuper colligi Mannam omnem quidem ex Fraxino & Orno; "ſed non ex omnibus individuis; unde in Calabria venduntur tales arbores "quæ Mannam dant, ut ſcribit Altomarus. . . Si quæratur cur Fraxinus in "Calabria Mannam fundat, in aliis regionibus non item? quæram & ego, "Cur lentiſcus in Chio inſula maſtichen manet, in Italia, &c. minimé? Re- "ſpondeo autem, id evenire, vel ratione temperie cœli, vel conditionis ſoli, "vel utriuſque, vel forte etiam peculiaris naturæ & conſtitutionis ipſarum "arborum." *R. H.* 1704.

From the leaves and branches, eſpecially in thoſe parts to which the foot-ſtalks of the leaves adhered, in the ſummer months, the Manna ſweats out, and by the ſun's heat thickens and dries into grains. It is collected in Calabria about or a little before the dog-days, in the heat of the day. It is got alſo by wounding the trees. "Eſt autem Manna duplex quæ e Fraxino col- "ligitur: 1. Spontanea, eaque duplex, vel corporis, ut vocant; vel folii. "2. Coacta, quam Sforzatellam vocant Calabri." Vid. *R. H.* p. 1703.

That Manna is the juice iſſuing from the tree itſelf, and no celeſtial or honey dew, as was believed, the monks *Angelus Palea* and *Bartholomæus ab urbe veteri*, in their opera in antidotarium Meſuæ, Venetiis 1543. in folio, ſufficiently proved: and many experiments have confirmed their opinion; as may be ſeen in *Donatus Antonius Altomarus* his treatiſe *De Mannæ differentiis ac viribus; deque eas dignoſcendi via ac ratione*; as publiſhed in his *opera omnia*, *Lugduni* 1565. in folio, and afterwards ſeveral times reprinted: in *J. B.* i. ii. p. 180. ad p. 200: and briefly in *R. H.* 1703. And ſince now every one believes it, it is needleſs to repeat the arguments for, or anſwer the objections againſt, it; which you have in *J. B.* at large. On which account alſo Mr. Geoffroy might have ſpared more than half of the twenty pages he has on this ſimple, and whatever elſe bore the name.

Although ſeveral ſorts of honey-dews, as they were believed to be, were obſerved by the ancients, (vid. Bod. in Theoph. p. 149.) which no doubt were exudations of plants; yet, according to *Friend*, (Hiſt. i. 271.) Actuarius is the firſt of the Greeks who mentions our Manna. He had it probably from

from the Arabians; at leaſt long before they knew the Manna of the Alhagi Maurorum Rauwolfii. (*T. Cor.* 54.) called Trungibin, & Tereniabin; though he was miſtaken as to its original. See *T. Voy.* i. p. 123.——Was the Eleomeli *Dioſcoridis*, l. i. c. 37. a ſort of Manna? Is much of the Manna of the ſhops factitious, and made of honey, or ſugar, with the addition of Scammony, or ſome other cathartic? For this *Mr. Hepburn* aſſures me he has the authority of a London apothecary.

" Probatur Manna candida vel flaveſcens, levis, in granula, vel ſtirias cavas " concreta, ſapore dulci nec injucundo, minus ſordida. Pinguis & mellea, " perperam a nonnullis anteponitur, quandoquidem ſæpius depravata eſt. . . . " Sæpe etiam nihil aliud eſt, quam ſaccharum craſſum cum melle, & tantillo " Scammonii compactum, unde vehementer aliquando purgat. Rejiciuntur " quoque maſſæ quædam candidæ, opacæ tamen, ſolidæ, graves, non ſtiriatæ, " quæ nihil aliud ſunt quam ſaccharum & Manna ſimul, cocta ad electuarii " ſolidi conſiſtentiam. Sed facile diſtinguitur denſitate, gravitate, candore " opaco, & guſtu à Mannæ ſapore prorſus diverſo." *Geoff.* ii. 591.

SECT. II.

It is diluent, antacrid, and purgative; called a cholagogue; and commended in coughs, hoarſeneſs, aſthma, heat of urine, and wherever mild cathartics are wanted; being ſafe for children, as well as pregnant women.

" Temperata eſt ad caliditatem inclinans, guttur, aſperam arteriam, tho- " racemque leniens, alvum blandè movens, bilem ſeroſoſque humores edu- " cens. Doſis infantibus a ʒij. ad ʒß: adultis ab ʒiß. ad ʒiiß. & ʒiij. " *N.* Quia facile bileſcit, in febribus, niſi frigida admiſta fuerit, non adeo " conveniens cenſetur. *Præp.* 1. Electuarium diacaſſia cum Manna. 2. Elect. " lenitivum cum Manna. 3. Manna tartariſata ſeu tabulæ de Manna. " 4. Manna liquida. 5. Spiritus Mannæ. 6. Sp. Man. alius. 7. Syrupus " de Manna laxativus." *Schrod.* 783.

1. It is a ſoft, ſweet ſubſtance, ſomewhat nauſeous, no ways acrid nor malignant, and produced by a remarkably diuretic tree. Vid. *Fraxinus.* " Sapor optime ſuavis, cum dulcedine modice linguam mordens; quæ nim. " morſu caret evanida eſt, & quæ nauſeoſa impura, aut adulterata aut ſennæ " infuſione, aut addito Scammonio." *J. B.* i. 2, 197. " Saporis eſt ſubacris, " ſubdulcis, pinguis & nauſeoſi; odoris nullius, vel melliti." *Herm. Cyn.* p. 697. " Saporis eſt ſubdulcis pinguis." *Dale* 332. " Saporis eſt dulcis " mellis ad inſtar, odoris fatui." *Nucl. Belg.* 185. " Sapore grato ſacchari, " cum aliqua acredine. . . Sapore dulci nec injucundo." *Geoff.* ii. 591. — 2. It eaſily and intirely diſſolves in water, contains little oil, and comes nearer to ſugar than to any gum or roſin: or is more ſaline than gummy or ſulphureous. — 3. Chemically analyſed, Mannæ ʒxvj. gave of inſipid phlegm, ſmelling of the ſimple, ʒj: of empyreumatic ſpirit, of an acrid and penetrating acid taſte, ʒxj. ʒij; of black fœtid oil ʒv; leaving an inſipid carbo weighing ʒij, ʒij, whence a little fixed ſalt was got: and the aſhes contained particles which a magnetic knife attracted. Vid. *Lem. Chym.* p. 727; who hence infers that Manna contains leſs earth than honey. For mellis ℔j. analyſed the ſame way,

left carbonis ʒiij. ʒv. *Ib.* p. 728. But it might contain more fixed oil, and leſs earth. According to his analyſis the jactura was ʒvj. But, according to *Geoffroy*, "Analyſi chymica Mannæ electæ ℔ij præbuerunt phlegma-"tis inſipidi ʒij. ʒvj. gr. xlviij; ſpiritus tum acidi tum aliquantiſper urinoſi "ʒx. ʒvj; olei ʒivß; carbonis ʒvj. ʒv. gr. xij, unde cinerum ʒvj. gr. vj, ac "inde ſalis alcali fixi ʒij. (è terræ ʒiv. gr. vj.) & jactura fuit ʒvij. ʒij. gr. xij. "(*M. M.* ii. 594.) Itaque (adds he) Manna conſtat ſale eſſentiali, ſeu tar-"taro copioſo, & exigua portione ſalis ammoniaci, multo ſulphure, tum tenui "tum craſſo, involutis." How vaſtly different from Lemery's! And—4. As it is extravagantly commended by Altemarus, ſo its being hurtful in fevers on account of its bileſcency, as they ſpeak, or in hypochondriac, melancholic, or ſcorbutic diſeaſes, as eaſily fermenting, is merely imaginary, & inanis metus: and Hoffman's cautelæ (p. 40. § 20.) uſeleſs. "Cautelæ in ejus uſu "duæ ſunt. Altera ne detur cruda ſed cocta: habet enim, non minus quam "caſſia flatuoſum quid. Altera ut detur cum acribus, thymo, hyſſopo, ut "actio ſit celerior." But this addition is prejudicial; rather hindering than forwarding its operation.

SECT. III.

It has been given to ʒiv: but ʒij. I think enough. If this quantity does not anſwer, it may be quickened with ſenna, or rhubarb, and ſometimes with tart. emet. gr. i. aut altera, or vini emetici ʒiij. or iv. It needs only be diſſolved in any aqueous fluid; and put through a cloth, to ſeparate any adhering impurities. It is uſed in the elect. diacaſſia and lohoch de Manna.

"Si ſtimulo egeat, ſenna aut rhabarbarum ei admiſceatur: potentius adhuc "acuitur, & efficacius tartari ſtibiati granis aliquot, in plures doſes diſtributis, "uno pro ſingulo doſi. Sic abſque ulla moleſtia, nauſea, vomitione, aut tor-"minibus, copioſa ſeri bilioſi evacuatio promovebitur. . . ℞ Mannæ Calab. "ʒiij, tartari ſtib. gr. v. Diſſolve in aquæ puræ ℔ij. Fiat colatura per cya-"thos propinanda." *Geoff.* ii. 597. Vide *Antimonium*, vol. i. 292.

SACCHARUM.

SECT. I.

Saccharum, *offic.* Sugar—is the eſſential ſalt of a reed; of a brown, gray, or white colour; of a ſubviſcid, pleaſant, ſweet taſte, and ſoft ſmell; brought from America. The plant is called

Arundo Saccharifera, *B. P.* 18. *Theat.* 293. *H. Ox.* iii. 220. *Sloan. Cat.* 31. *Hiſt.* i. 108. Arundo Saccharina, *J. B.* ii. 531. *Ger.* 38. *R. H.* 1278. *Dale* 266. Harundo Saccharifera, *Park.* 1210. Arundo Saccharina, Calamus Saccharinus, *Tab. Ic.* 257. Tacomarée, *Piſo* 108. Saccharum, *H. Cliff.* 26. The Sugar-Cane or Reed.

It grows in both the Indies, &c. "Creſcit in utraque India; ut in Madera, "Hiſpaniola, Braſilia, Sumatra, Arabia Felic. &c. inque locis campeſtribus, "inundatis per hyemem, juxtaque ripas," *H. Cliff.* 26; and increaſes faſt by its creeping roots.

When theſe reeds come to a proper maturity they are cut down, ſtript of their leaves and tops, and their juice preſſed out by making them paſs betwixt very cloſe large vertical rollers or cylinders, armed with iron. Tho' this juice is very ſweet, yet it will not keep twenty-fours without turning ſour; ſo that it is conveyed very ſoon into a large copper, where it is kept hot, and bubbling, but not ſuffered to boil by the continual addition of freſh cold juice. From this veſſel, being well ſkimmed, it is conveyed into a boiler, where it is again ſkimmed very carefully. Hence it paſſes through ſeveral other boilers, four or five gradually ſmaller, being well ſtirred, ſkimmed, and clarified, by means of a ſtrong lye: and in the laſt boiler, called the tack, it is brought to a due conſiſtence (a ſmall quantity of ſweet oil being added to ſtop its boiling or riſing). It is then emptied into a cooler, and thence into inverted conical earthen pots, where it ſoon hardens into ſugar. When it is hardened, they cover it with clay, take out the ſtopper that was in the ſmall and undermoſt end of the pots, and leave them in frames for four months to drop the melaſſes, which is afterwards fermented and diſtilled into rum. The ſugar, having thus purified itſelf from the melaſſes, is beaten out of the pots; the coarſer tops and bottoms, about a third of the whole, are ſeparated; and the finer middle part caſked up for ſale. They ſay, if no clay be uſed, the melaſſes is ſeparated in one month's time; but the ſugar is coarſer, and called common muſcavado ſugar; but when covered with clay, the tops and bottoms only are muſcavado, and the middle part white or lump ſugar. Of this ſugar, by refining, &c. are made the caſſionade, loaf ſugar, coarſe, and fine or refinade; brown and white ſugar-candy, &c. which ſeem to differ principally, if not only, in the proportion which the oily and mucilaginous parts bear to thoſe that are more purely ſaline. And hence *Mr. Lemery*, *Pharm.* 114, obſerves, that ſyrups made with the coarſe ſugars do not ſo ſoon candy as when they are made with the finer loaf ſugars. Vid. etiam *Narrat. in Pemb. Diſpenſ.* p. 92. The whole proceſs of the ſugar making is related by many; as by *Richard Ligon*, in his *Hiſtory of Barbadoes*, *London* 1657. in *fol.* by *G. Piſo*, *Marcgrave*, *Hernandez*, *Hughs*, *J. B. R. H.* &c. And, circumſtantially enough, by *Savary*, *Dict.* vol. ii. col. 1634. to 1650. where alſo you have the manner of refining and candying it, and the different ſorts of it commonly uſed. I ſhall only add further, that it is refined at home by diſſolving it in lime-water, clarifying it with whites of eggs, boiling to a due conſiſtence; and putting it into earthen pots, where it granulates, and more melaſſes drop from it. This is the ſingle refinade; which being diſſolved in ſimple water, and undergoing the proceſs as above, is the double refinade, or the fineſt loaf ſugar. "The proceſs for ſugar-"candy differs from the former only in not boiling the liquor ſo thick, and "ſetting it in a hot ſtove, where it may remain liquid enough, that the ſugar "may cryſtallize, in the ſame manner as ſalts do in water." *Narrat. Pemb. Diſp.* p. 94.

Sugar-candy is called Saccharum candum, candium, lucidum, cryſtallinum; or canti vel cantium, in authors. "A candore non habet nomen, nec ab "inſula Creta, καντι, vel καντιον, ut apud Myrepſum legitur: Græci Barbari "vocarunt, quod anguloſum ſit, & cum frangitur, in partes ſemper diſſiliat "angulatas, id Græci recentiores καντον & καντιγοτον, vocant." *Bod. in Theoph.* p. 484.

"Eſt

" Eſt quoddam mellis concreti genus quod σακχαρον nominatur, quodque " in India & Arabia Felici in arundinibus reperitur, conſiſtentia ſali ſimile; ac " dentibus etiam ſalis modo fragile. Eſt illud alvo idoneum, & ſtomacho " utile: ſi aqua dilutum bibatur: vexatæ vero veſicæ renibuſque auxiliatur: " quin & illitum ea diſcutit quæ pupillis tenebras offundunt." *Dioſcor.* l. 2. c. 104. " Saccaron Arabia fert, ſed laudatius India. Eſt autem mel in " harundinibus collectum, gummium modo candidum, dentibus fragile, am- " pliſſimum nucis avellano magnitudine, ad medicinæ tantum uſum." *Plin.* l. 12. c. 8. p. 304. " Sed & σακχαρ, ut vocant, quod ex India & Felici " Arabia convehitur, concreſcit quidem, ut aiunt, circa calamos, & ipſum " mellis eſt ſpecies, minus certe noſtrate dulcis, ſed adſimiles ei vires obtinens, " quod ad abſtergendum, deſiccandum, & digerendum attinet. Porro qua- " tenus nec inimicum ſtomacho eſt, ceu noſtras, nec ſitim afferens, eatenus " ab illo ſubſtantia differt." *Galen Simpl.* l. 7. *fol.* 55. E. " Cæterum Sac- " charum, quod ac Felici Arabia affertur, minus dulce eſt eo quod apud nos " eſt, ſed equalem vim habet, ad hoc quod neque ſtomacho noxium eſt, ne- " que ſitim inducit velut hoc (viz. mel.) noſtrum." *Paul.* l. 7. col. 632. F; abridging only thus Galen, though the index makes him diſtinguiſh between the Grecian and Arabian Saccharum, thus: " Sacchari Arabici & Græci " differentia & vires, 632. f. Aeg." In a fragment of *Theophraſtus*, *De Melle*, mention is made of one ſort ἐν τοις καλαμοις, in arundinibus. (Ed. Heinſii, p. 475.) But the Saccharum of the ancients ſeems to have been got from a different plant, and to be the Saccar Mambu. Vid. *Garcias in Cluſ. Exot.* 165. & *Bod. in Theoph.* p. 481—483. " Arundo (Indica) arbor: in qua humor " lacteus gignitur qui Tabaxir Avicen. & Arabibus dicitur. Mambu Indo- " rum, in cujus arundinibus Tabaxir ſive Saccar Mambu, Garziæ." *B. P.* 18. Vid. *Cluſ. Exot.* 18. *R. H.* 1315. Saccharum nomen habet à Sacar.

" Saccharum, *offic.* σακχαρον, *Dioſcoridis:* σακχαρ, Galeni: μελι ἐν καλα- " μοις, Theophraſti: μελι καλαμινον, Arriani: ἅλς ἰνδικος, Pauli Æginetæ: " Zuccar, *Arabum:* Saccharon, *Plinii:* Eſt ſal eſſentialis, pinguis, oleagino- " ſus. . . . Ex arundine ſaccharifera extractus." *Geoff.* ii. 732. According to him the juice paſſes but three boilers; is deſpumated in the firſt; ſkimmed, boiled down, and mixed with a ſtrong lye, in the ſecond; then ſtrained per pannos, and brought to a due conſiſtence in the third: p. 738.

SECT. II.

Sugar is diluent, detergent, emollient, and antacrid; called pectoral, ſtomachic, diuretic, and laxative; and commended in coughs, hoarſeneſs, aſthma, conſumption, &c. agreeing in many things with liquorice: but it is more uſed for its taſte than virtues.

Schroder does not give its virtues, but in a note ſays, " Refinatum, quia " aliquantulum acrius eſt, præſtat in attenuatione, inciſione, abſterſione: non " refinatum in lenitione, lævigatione, adeoque in pulmonum vitiis, &c." " *Præp.* 1. Saccharum penidium. 2. Sacch. roſatum. 3. Sacch. violatum. " 4. Aqua ſeu ſpiritus acidulus . . . eſt inſtar ſp. guajaci. 5. Oleum. 6. Sal. " 7. Liquor ſeu ſyrupus. 8. Liquor alius. 9. Eſſentia & cryſtalli Sacchari."

Schrod. p. 739. And *Dale*, p. 266. ſays (from *R. H.*) "It would require a "volume to give its virtues and uſe in food and medicine, with its numerous "preparations."

"Tam alimentum quam medicamentum eſt, temperans & obtundens quæ- "vis acida; reſolvens quævis rigida & aſpera. Promovere urinam experien- "tia docuit; ſpecificum eſt in tuſſi, raucedine, aſperitate, aliiſque pulmonum "vitiis. Melancholicis, hypochondriacis, hyſtericis, febricitantibus, &c. ob "facilem ſui aceſcentiam ſacchari largior uſus non convenit. Externè vulnera- "rium & ophthalmicum eſt." *Herm. Cyn.* p. 704.

"In corpore humano latice naturali dilutum, lixivium præbet ſaponaceum, "quod oleoſa, viſcoſa, vi vitæ adjuvante, diſſolvit; hinc pituitam nunquam "generat, ſed diſſolvit. Nec bilem auget, aut in illam convertitur, ſed ape- "rit, attenuat, dividit. Interim tamen olea nimis ſolvendo, macilentiam in- "ducere poteſt. Ut & attenuatione nimia, debilitatem producit, & laxitatem "nimiam. Quare & rachiticis, ſcorbuticiſque ſæpe nocuiſſe viſum." *Boerh. Chem.* ii. p. 160.

1. It is ſubviſcid, very ſweet, and more univerſally agreeable to the taſte than any ſubſtance I know, without any acrimony. "Conſtat mucagine tem- "perata dulci, cum blanda acredine." *Herm.* l. c. "Sapore eſt dulci grato; "odore fere nullo." *Geoff.* ii. 732. — 2. It diſſolves intirely in water; cryſtal- liſes; renders oils permiſcible with aqueous fluids; melts in the fire, and flames; is eaſily fermented into wine, whence alcohol may be diſtilled; or into as good vinegar as any wine can afford. "An eſt ſal? qui ergo inflamma- "tur igne? . . . An oleum? quomodo igitur cryſtalliſatur? . . . An ſal eſſen- "tialis? unde igitur fermentatur? Eatis per totam naturam, querite! haud "crediderim, ullum corpus repertum iri in quo hæc ſimul concurrunt." *Boerh. Chem.* ii. 160 — 3. Yet by a chemical analyſis it yields but little oil, and a conſiderable quantity of acid ſpirit. "Sacchari candi ℥viij. & ſalis am- "moniaci ℥iv. diſtilled with a ſand heat, gave of clear agreeably acid ſpirit "℥iij. ʒj, without empyreuma; and of a fœtid brown oily liquor about ʒvij. "(from which by rectification ſcarce olei puri ʒj. was got) & carbonis ℥vij. ʒvj. "(ſo that only ʒij. were loſt). The ſpirit drawn without ſal ammoniac is not "ſo ſtrong as that with it." Vid. *Lem. Chym.* p. 662. "Analyſi chymica "ex Sacchari albiſſimi ℔ij. prodierunt phlegmatis inſipidi ℥j. ʒß; liquoris "primo limpidi, deindè rufeſcentis empyreumatici, tum acidi tum urinoſi "℥xij. ʒvj, (*i. e.* humorum ℥xiij. ʒviß;) olei ℥iij. ʒj. gr. xliv. Carbo pen- "debat ℥viij. ʒj. gr. lxiij; unde cinerum ʒix. gr. x. ac inde ſalis fixi alcali "ʒij. gr. lx. (ergo terræ ʒvj. gr. xxij.) & jactura fuit ℥viij. ʒvj. (but here the "ſum is ℔ij.+℥j. ʒvij. gr. lxxi, that is two ounces within one grain too "much). Saccharum eſt ſal eſſentialis, conſtans ex acido ſale, oleo & terra. "Concreſcit in cryſtallos priſmaticas, ex octo ſuperficiebus planis conſtantes, "quarum duæ baſes oppoſitæ æquales ſunt & parallelæ, cæteræ ſunt paral- "lelogrammata. Nullas aut acidi, aut alcali notas præbet: flammam con- "cipit & luculenter ardet: aqueis menſtruis facillimè ſolvitur, ægrè ſpirituoſis "& oleoſis: aqua dilutum fermentationem ſubit, & vinoſum ſaporem primum "acquirit, poſtea acetoſum. Si Sacchari ℔j. in aquæ ℔vj. vel viij. ſoluta, "& recentis fermenti cereviſiarii cochleare unum accurate miſceantur, & lento "calori exponantur, in vaſe idoneo clauſo, ſed non omnino repleto; paucis

" horis fermenteſcere incipiet magna cum vehementia, & poſt tres quatuorve " ſeptimanas, plus minuſve pro quantitate liquoris & loci tepore, fortiſſimum " liquorem præbet vinoſum, hydromeli non abſimilem. Ex eo diſtillato for- " tiſſimus ſpiritus ardens extrahitur. Si vero tota fermentans materia conti- " nuo calori diutius exponatur, intra breve temporis ſpatium, in fortiſſimum " acetum mutabitur, aceto vini prorſus ſimile." *Geoff.* ii. 744, 745. Here, to make vinegar, we put one part of loaf ſugar into a barrel, and pour on it eight parts of boiling water; ſetting it in a place moderately warm, as not very far from the kitchen fire, for a night; and next morning, when it is ſufficiently cooled, put into it a ſlice of a wheaten loaf which has imbibed two or three ſpoonfuls of freſh yeaſt. It ſoon begins to ferment, foams a little, and makes a hiſſing noiſe; but neither riſes, like malt liquors, nor boils like wine. This fermentation continues two or three weeks, as is known by its noiſe; during which time the bung is only lightly covered: after the fermentation is over, the bung is ſtopped up as cloſe as can be; and the veſſel remains in the ſame place for eight months more: when the liquor is commonly turned into good vinegar, not inferior to any that comes from France, on any account whatſoever; and much preferable to what is ſold commonly for good white wine vinegar. It may be made of melaſſes, or coarſe ſugar, but then the colour is not ſo fine. But—4. The leaves, tops, and marc of the ſugar-canes, and ſkimmings of the juice fatten cattle: and the fleſh of hogs, thus fed, is ſaid to be more delicate and tender than otherwiſe it would have been. " Af- " ferunt enim ex arundinibus contritis & jam expreſſis ſues mirum in modum " pingueſcere, eorumque carnem adeo teneram & ſapidam effici, ut caponis " carni præferatur." *Geoff.* ii. 746. Sugar tickles the noſe, and they ſay provokes ſneezing, as it pains carious teeth. And—5. As it is evidently uſeful in all diſeaſes accompanied with, or cauſed by, rigidity of the fibres; phlegmatic, yea and inflammatory, viſcidity of the juices; or bilious, rancid, or putrid acrimony; and conſequently in coughs, conſumptions, inflammatory, bilious, or putrid fevers, heat of urine, obſtructions of the viſcera, &c. ſo the lax, tender, delicate, ought not to be indulged a too liberal uſe of it; eſpecially ricketty children: and ſuch as are ſubject to the tooth-ach, or have carious teeth, would do well to rince their mouth with cold water after taking it.

How *pleaſant* ſoever ſugar is, it wants not *bitter* enemies, who accuſe it as a main cauſe of the ſcurvy and conſumption in Britain; of worms in children, and vapours in women. Vide *Willis de Scorbuto*, *R. H.* 1279. &c. On the other hand *Dr. Fred. Slare*, in his *Vindication of Sugar*, annexed to his *Experiments on Bezoar*, *London* 1715. in 8vo, ſufficiently acquits it of having any hand in the conſumption and ſcurvy; not allowing it to hurt even ſo much as the teeth, from his own experience. He ſays the *duke of Beaufort*, who died of a fever when ſeventy years old, and who uſed to devour near a pound of ſugar every day for almoſt forty years, had very firm teeth: and, when his body was opened, all his viſcera were as ſound as they are uſually found in a perſon of twenty. Heuſed to repeat the Engliſh proverb, " *That which pre-* " *ſerves apples and plumbs, will always preſerve liver and lungs.*" The Dr. next gives an account of *Mr. Malory*, his grandfather, who all his life-time loved ſugar, after eighty years had a new ſet of teeth, and died about 100 years old of an apoplexy: and then tells us what good effects ſugar had on himſelf, then near

near ſixty-ſeven years old, uſed externally as an errhine and dentrifice, as well as internally. *vide* p. 59—63. " Saccharo roſaceo ſe quoſdam phthiſicos vidiſſe " curatos teſtantur Montanus, Valeriola, Foreſtus, quo ægri in maxima quan- " titate utebantur. Riverius novit Pharmacopœum quendam phthiſicum, " qui ingentem Sacchari roſacei quantitatem ſibi ipſe præparabat, idque per- " petuò comedebat; & hoc ſolo remedio ſanatus eſt, ut refert *cap. de phthiſi.* " Obſervandum tamen eſt ex unanimi medicorum conſenſu bilioſos, melan- " cholicos, ſcorbuticos, nec non hyſtericas mulieres ab eo abſtinere debere; " facile enim fermenteſcit, & æſtuantium aut fermentantium humorum effer- " veſcentiam & ardorem auget, eorumque morborum ſymptomata graviora " efficit." *Geoff.* ii. 751. (Compare this with what he has on the caſſiæ pulpa.) That this is true ex unanimi medicorum conſenſu, I deny. And what he has quoted from Slare, a page or two before, ſufficiently ſhews that he is wrong. He confounds fermentation with æſtuantium humorum ardor. Will any one ſay, that all ſorts of grain, ſweet and acidulous fruits and herbs, &c. are hurtful in the ſcurvy, or increaſe the ardor humorum? That Sugar cannot anſwer in every ſcorbutic, &c. caſe, as when roborantia & acria ſtimulantia are indicated, I eaſily grant; but that it does little hurt in that diſeaſe is evident, ſince thoſe moſt affected with it are ſuch who make leaſt uſe of it. Vid. *Slare.*

" Salinis Sacchari ſpiculis onuſta bilis acrior evadit: unde æſtum non ſolum " in inteſtinis accendit, ſed etiam per totum corpus, dum in maſſam ſangui- " neam tranſvehitur. Infantibus vermes ingenerat." *Geoff.* ii. 747. But this is not fact: for if ever Sugar do any prejudice, it is by diminiſhing, not increaſing, the acrimony of the bile. And it is alſo a groundleſs opinion with ſome that bitters kill worm; but ſweets, eſpecially ſugar and honey, breed and increaſe them. For Redi's experiments evince, that a ſolution of honey or ſugar much ſooner kills worms (*viz.* in an hour or two's time) than a ſtrong infuſion of wormwood or aloes (in which they lived twenty-fours. Vide *Redi's Obſ. circa animal.* p. 156, 159, 165, & 166.

I need not determine the doſe; nor tell you in how many forms it is uſed. We have it in many tinctures, decoctions, ſyrups, gellies, confections, conſerves, electuaries, lochs, troches, and yet much more frequently uſed at the table than in the ſhops.

" A hundred weight of good, clean, brown ſugar, will afford eighty pints " of proof ſpirit called brandy, as a rich diſtiller informed me. That very " conſiderable quantities of ſpirits are gained, both out of clean melaſſes and " good ſugar, I know to be true by my own experiments." *Slare Vind.* p. 52.

SUCCUS ACACIÆ.

SECT. I.

1. Acacia, Acacia vera, & Succus Acaciæ, *offic.* Vide gummi Arabicum ſupra, p. 382.

2. Acaciæ Germanica, *offic.* German Acacia—is an hard inſpiſſated juice, of a blackiſh colour on the outſide, reddiſh within, and of an aſtringent ſouriſh taſte, without ſmell: it is expreſſed from the fruit of the

Prunus

Prunus ſylveſtris, *B. P.* 444. *T.* 623. *Dod.* 753. *J. B.* i. 193. *Ger.* 1497. *Park.* 1033. *R. H.* 1527. *Syn.* 462. Prunellus ſylveſtris offic. *Dale* 305. Prunus ſpinoſa foliis lanceolatis, *H. Cliff.* 186. The Black Thorn, or Sloe-tree;—which is very common in thickets, hedges, &c. almoſt every where, flowering in April. "Acacia Germana non infrequens in officinis pro Acacia vera venditur." *Dale* 305.

SECT. II.

It is uſed only as a ſuccedaneum for the Acacia vera; being "put into all "the great compoſitions," ſays *Mill. Bot.* 360.

"Acaciæ veræ ſuccus hic cum rarus ſit, ſubſtituitur ut plurimum Acacia "Germanica. . . Pruni ſylveſtris folia, fructus, cortices, refrigerant, exiccant "gr. 3. aſtringunt, incraſſant. *Uſus præcipuus* eſt in profluvio alvi, uteri. "Extrinſecus in gargariſmis, balneis uterinis. Flores reſolvunt, renum ſabu-"lum educunt, compreſſiones cardiacas leniunt, pleuriticam radicem (nonne "pleuriticum laticem?) reſolvunt, alvum laxant. *Præp.* 1. Conſerva florum. "2. Aqua ſtillat. & 3. Syrupus eorum. 4. Succus fructuum inſpiſſatus. "5. Vinum: & 6. Fructus conditi." *Schrod.* 524.

The *New London M. M.* has expelled the Acacia Germanica, but retains the pruni ſylveſtris fructus, or pruna ſylveſtria; and makes a conſerve of them. "Fructus bene maturi alvum laxant; ſed immaturi refrigerant & aſtringunt: "quapropter melle conditi dyſentericis & alvi profluvio laborantibus exhi-"bentur. . . Ex iiſdem immaturis & recentibus ſuccus exprimitur, & inſpiſ-"ſatur ad extracti ſolidi conſiſtentiam, ſub Acaciæ Germanicæ nomine, & "Acaciæ veræ ſuccedaneum habetur. Majori tamen aciditate donatur; qua-"propter magis refrigerans & aſtringens cenſetur. Ad ʒj. exhibetur, ſub "forma boli, &c." *Geoff.* ii. 719. The ripeſt Sloes that ever I taſted were very aſtringent and acid. The flowers and leaves are bitter and purgative.

SUCCUS HYPOCISTIDIS.

SECT. I.

Hypociſtis, Succus Hypociſtidis, *offic.* is a ſolid inſpiſſated juice of a black ſomewhat ſhining colour, and ſowriſh aſtringent taſte, without ſcent. It is expreſſed from the

Hypociſtis (ſub ciſto) *B. P.* 465. Hypociſtis, *Dod.* 191. *Ger.* 1275. *Park.* 667. *J. B.* ii. 7. Hypociſtis purpurea, ſeu Carmeſina, cytino candicante, *Cluſ. Hiſt.* 69. Hypociſtis purpurea flore candicante. *T. Cor.* p. 46. Orobanche minor, e ciſto naſcens, *H. Ox.* iii. 502. Orobanche quæ Hypociſtis dicitur, *R. H.* 1228. Hypociſtis offic. *Dale* 197. Aſari ſpecies *Linnæo. G. Pl.* p. 207. Hypociſtis, or Rape of Ciſtus.—This grows in Spain, Candy, &c. and on the roots we have the Ciſtus.

"Ad Cyſti maris primi radices copioſè naſcitur elegantiſſima Hypociſtis, "novo vere, cum Ciſtus jam ad explicandos flores ſe parat: nam quando "primum è terra emergit, purpureum ſive Kermeſinum ſericum eſſe diceres:

" deinde paulatim assurgens, & sese explicans, multum de pristini coloris ele-
" gantiâ remittit, & cytinos suos profert candicantes, turgidos & lento succo
" plenos: qui a peritis pharmacopœis densatur & in usum adservatur." *Clus. H.* 68; who, p. 72. mentions another, *viz.* Hypocistis lutea, growing on the root of the Cistus folio thymi, which he understood boys and shepherds eat: also a third sort, p. 79. growing on the root of the Cistus Ledon quintus. In *T. Cor.* p. 46. there is a fourth, *viz.* Hypocistis Cretica flore purpureo, which *Mr. Chomel* takes to be the species whence the juice is expressed. But *T.* reckons all the four rather varieties than different species: so that they are probably of the same nature.

" Hypocistidis caulis saporis est amari & summè astringentis. . . Flos mali
" punicæ cytino similis est. . . . Fructus succo turgidus lento, glutinoso, sapo-
" ris fatui. . . . Ad succum præparandum cytinos seu fructus recentes contun-
" dunt, & succum eliciunt, qui subinde insolatur & densatur, ad extracti solidi
" consistentiam." Thus *Geoff.* ii. 720, not very consistently.

This is generally believed to be the Hypocistis antiquorum, and not without reason. Vide *Dioscor.* l. 1. c. 127. p. 64. " It comes to Marseilles from
" Candie and Languedoc, from three to four quintals annually, for medicine;
" worth ten to twelve sols per pound, and consumed almost all in England
" and Holland." *Sav. Dict.* iii. 507.

SECT. II.

It has the virtues of the acacia Germanica; but is little used except in the mithridatium & theriaca. The dose is to ʒj.

" Refrigerat (3.) siccat, potentissimè astringit, condensat. *Usus præcip.* in
" quibuscunque fluxionibus sistendis, diarrhœa, lienteria, dysenteria, profluvio
" uteri, vomitu, &c. Uti & excretione sanguinis ex lapsu casuve orta. Ex-
" trinsecus roborat viscera humidiora, ventriculum, epar, &c. *N.* Quia
" rara est, ejus loco succus acaciæ recipi potest, quippe analogas vires habet,
" quamvis imbecilliores. *Præp.* Hypocistis depurata." *Schrod.* 722.

" Ex iisdem fere constat principiis, ex quibus acacia, & iisdem virtutibus
" donatur. Potenter astringit. . . . Intus sumitur a ʒß. ad ʒj. In gargar.
" repercutientibus usurpatur." *Geoff.* ii. 721.

SUCCUS JAPONICUS.

SECT. I.

Terra Japonica, Catechu, *offic.* is a hard, brittle substance, of a dark brown colour, somewhat yellowish or clay-coloured on one side; of an earthy, astringent, and somewhat bitterish taste at first, then sweetish and pretty agreeable; without any smell; brought from the East-Indies.

" Est substantia compacta, sicca, friabilis, externe fusco-rubicundi vel nigri-
" cantis coloris: interne habet strata albicantia, cum lineis nigris interpositis;
" saporis est austeri, primo amaricantis, in recessu dulcis, & grati; humectat
" os; dissolvitur in aqua, & in spiritu vini," *Nucl. Belg.* p. 68.

" Est

" Eſt ſubſtantia reſinoſa & gummoſa indurata, ex rufo nigreſcentis obſcuri " & obſoleti coloris, expreſſa ex fructibus immaturis arecæ, & corticibus " arboris Indicæ Catſchu, acaciæ ſpeciei, & in maſſam calore ignis redacta. " Saporis adſtringentis & auſteri, poſtmodum dulcis & grati; odoris vel nul- " lius vel debilis. Et fructibus & corticibus ſeorſim affunditur aqua impreg- " nata calce, quam Indi parant ex conchyliis, utuntur loco ſalis tartari, quo " melius terrea virtus extrahatur, confundunt ſolutiones & inſpiſſant." *Herm. Cyn.* 721.

Though we know little of the origin of this ſubſtance, or what it is, yet we are ſure it is not an earth, and that it is pretty probable it comes not from Japan, otherwiſe Kempfer would have mentioned it. Dale, Lemery, Geoffroy, make two kinds of it: I know only one. " There is but one ſort " of Cachore, though when broken it is found of different colours and qua- " lities, which is owing to the faulty preparation." *Bolduc. Mem. Acad.* 1709. p. 293. " Non provenit in regno Japan; locus natalis eſt regnum Coroman- " del." *Albin. MS.* It is an extract prepared from the tree cate or cato, (Vide *Cluſ. Exot.* p. 163.) According to Garzias Herbertus de Jager makes it a juice got from ſeveral trees, of which the areca is one, Vid. *Ephem. Germ. Decur.* 2. *An.* 3. or *Geoff.* ii. 723—727. You have Wedelius's opinion, and alſo that of Paulus Ammannus, and of Joan. Otho Helbigius in *Dale*, p. 270. And by Mr. Albert's account of it, which Mr. Juſſieu gives, *Mem. Acad.* 1720. p. 440. it is nothing but an extract of the areca: which opinion is adopted in our Pharmacopœia, N. B. Albert was ſeveral years ſurgeon-major at Pondicherry in Coromandel.

Areca, *offic.* Palma, cujus fructus ſeſſilis Faufel dicitur, *B. P.* 510. Faufel ſive Areca, Palmæ foliis, *J. B.* ii. 389. Areca ſive Faufel. *Garz. Cluſ. Ex.* 188. *Ger.* 1520. Areca ſive Faufel, ſive Avellana Indica verſicolor, *Park.* 1642. *R. H.* 1363. Palma arecifera nucleo verſicolore, nuci moſchatæ ſimili. *Par. Bat. prod.* 361. *Pluk. Phyt.* 309. *Alm.* 275. *Fl. Mal.* 197. Avellana Indica Aceſtæ, *Cluſ. Exot.* 268. Nux Faufel, ſeu Pynangh. *Bont.* 90. Caunga, *H. Mal.* i. 9. t. 5. 6. 7. 8. The drunken Date-tree, *Ger.* The Indian or Malabar Nut, *Dale*, p. 270.

On calcination it ſeems to leave a greater quantity of aſhes than any expreſſed juice would do: for Terræ Japonicæ ʒij calcined left cinerum gr. xxxiii. that is more than a fourth part. *Iteretur experimentum.*

SECT. II.

It is aſtringent, incraſſating, and antiſeptic; yea and antacrid alſo; called pectoral and ſtomachic; and commended internally for fluxes, hæmorrhages, the lientery, incontinentia urinæ, dyſentery, vomitings, diabetes, fluor albus; in coughs, hoarſeneſs, catarrhs, &c. and externally for ſpungy gums, looſe teeth, ſore mouths, &c.

" Catechu ſeu Terræ Japonicæ uſum perhibent celebrem in exiccandis catar- " rhis, capiteque roborando, ſi in ore detineatur." *Schrod.* p. 518. " Vi ad- " ſtrictoria inſigni prædita eſt, & valet ad vomitus nimios, fluxus ventris, dia- " betem, fluorem album, hæmorrhagias, præcipuè ſputum ſanguinis; ad rau- " cedinem,

" cedinem, tuſſim, & alios affectus pectoris, & aliarum partium in quibus opus " eſt adſtrictione; in affectibus oris abſtergendo & roborando optime prodeſt." *Nucl. Belg.* 68.

1. Its taſte is very compound, being not only auſtere, but alſo ſweetiſh, ſubviſcid, and agreeable: and it makes ink with vitriol. " Saporis eſt aſtrin- " gentis & auſteri, poſtmodum dulcis & grati; odoris nullius." *Dale* 270. " Saporis aſtringentis, ſubamari, poſtmodum dulcioris et grati, odoris expers." *Geoff.* ii. 722. — 2. Water diſſolves little more of it than ſpirit of wine does. (α) *Mr. Bolduc* diſſolved of good Cachore ℥iv. in aquæ ℥xxiv, with a moderate heat. It appeared intirely diſſolved, except a few coarſe parts; but when cold it became a ſort of mucilage of a fleſh colour, like a fine bole diſſolved in water: which made him dilute it with water with a gentle heat; and then filter it, and evaporate to the conſiſtence of an extract as dry as the Cachori commonly is; by which means he had of extract ℥ij. ʒiij. The reſiduum weighed only ℥j. (ſo that ʒv. were loſt) whence he got with rect. ſp. vini extracti ʒv. of a leſs delicate and harſher taſte, leaving no ſweetneſs behind it. There remained after all ʒij. of feculencies, which neither water nor ſpirit could diſſolve. (β) He then diſſolved in ſp. vini rect. q. s, aſſiſted by heat, ʒiv. of Cachore naturel alſo; which did not coagulate by cold, as that in water had done. And having filtered, drawn off the ſpirit, &c. he had of a very fine ſhining extract ℥ij. ʒvj. But it could not be dried like that with water: it was more unctuous, not ſo ſweet on the tongue, but much more harſh, and very diſagreeable. The reſiduum weighed ʒix; whence he had of a coarſe extract with water ʒv, of little taſte and diſagreeable. He mentions not what remained after this ſecond extraction. (γ) He calcined alſo in a crucible cachori ℥i. and had cinerum ʒiß. which yielded ſome grains of a fixed alc. (δ) By a chemical analyſis he got a little phlegm, an acid ſpirit, much thick oil, mixed with ſome drops of an urinous ſpirit. From ℥iv there remained of caput mortuum only ℥j. whence after calcination there were ſalis fixi gr. xij. He obſerves that the juices which compoſe the Cachou, or of which it is made, muſt be very viſcous and mucilaginous: and that the ſimple itſelf is preferable to any preparation of it; the beſt being the extract with water. Thus *Bolduc Mem. Acad. R. An.* 1709. p. 227—232. *Edit. Paris.* 1711. in 4to. But I do not ſee how ſo much ſhould have been loſt: nor how the feculencies of ℥iv. ſhould be only ʒij, when ℥j, calcined in a crucible left cinerum ʒiß. Why did he not ſpecify the weight of the chymical principles? Mr. Geoffroy takes no notice of Boulduc's experiments; nor does he favour us with any of his own. But—3. The Areca is ſaid to be ſomewhat narcotic. " Fructus immaturus " ſtupefacit et inebriat: editur autem immaturus a nonnullis, ut veluti temu- " lenti, dolorum cruciatus non ſentiant." *Garz. Cluſ. Exot.* 188. " Areca, " obſervantibus Garc. et Bontio, nondum matura, maſticata vertiginem ſubi- " tam inducit, non ſecus ac ſi ſumpto vino quis ebrietatem contraxerit. Sed " hæc alteratio, ſumpto pauco ſale et hauſtu aquæ gelidæ, breviter evaneſcit." *Geoff.* ii. 727. " Fructus hujus immaturus vertiginem inducit, ac ſi ſumpto " vino quis ebrietatem contraxerit." *Dale* 271. Has the Terra Japonica any ſuch effect? *Mr. Juſſieu* (l. c. viz. *Mem. Acad.* 1720.) ſays it has united in it the virtues of acacia, hypociſtis, ſanguis draconis, and ſuccus glycyrrhizæ.

SECT.

SECT. III.

It is given to 3ß. but there does not appear to be any danger in 3j. It is uſed in the decoctum diaſcordii, lohoch diatragacanthi, & trochiſci de Terra Japonica.

" Pharmacopolæ Londinenſes Terræ Japonicæ nomine extractum ipſum " prout adfertur intelligunt; catechu vero appellatione, compoſitum quiddam " ex extracto moſcho, ambra, &c." *Dale*, p. 271.

TARTARUS.

SECT. I.

Tartarus, Tartarum, *offic.* Tartar, Argal, or Wineſtone,—is an hard, heavy, ſaline concretion, found adhering to the inner ſurface of caſks in which wine has been long kept, in form of a ſtony cruſt, of a whitiſh or reddiſh colour, and acid or acetous taſte.

New, foul, or vapid wines yield no tartar. The tartar of white wine is whitiſh, and of red wine reddiſh: the white is the pureſt; but when both are ſeparately diſſolved and cryſtalliſed there is no difference. The beſt white tartar comes from Germany; as does alſo the beſt red. Tartar is not a ſtony concretion, nor wine-dregs; but a real though ſingular kind of ſalt, which may be called the eſſential ſalt of wine. No tartar is produced by liquors made of malt or honey. Vide *Boerh. Chem.* 2. *proceſſ.* 8. p. 39. *proceſſ.* 54. p. 223. & *alibi*, and *Helmontii Tartari Hiſtor.* p. 223. § 8.

" Veteres Tartarum a vini fæcibus non diſtinguunt. Reipſa eandem habent " originem, nec multum inter ſe diſcrepant: ſi quidem muſtum in doliis poſt " abſolutam fermentationem aſſervatum, per tempus duplicem deponit fæcu- " lentam ſubſtantiam. . . . Fæx vini eſt ipſe Tartarus, ſeu ſal eſſentialis vini, " continuata hujus liquidi fermentatione attenuatus, & humore ſpirituoſo ſo- lutus, &c." *Geoff.* ii. 758. Strange!

SECT. II.

Tartar is antiſeptic, attenuant, diuretic, and cathartic; commended in ob- ſtructions of the viſcera and chronic diſeaſes thence ariſing; in ardent fevers, and in all bilious and putrid diſeaſes, where heat and thirſt offend.

" Uſus Tartari depurati eſt craſſos tartareoſque humores, præcipuè autem " in prima ventris regione ſtabulentes, incidere ac attenuare: commodè itaque " adhibetur in obſtructione epatis, lienis, meſenterii, renum, in affectu hypo- " chondriaco, &c. Hinc quoque ſibi primas vendicat inter digeſtiva univer- " ſalia, cujus rei gratia & catharticis præmitti plerumque ſolet. Quinimò " ad laxandam alvum commodiſſimum medicamentum eſt, ſi ſaltem gr. 1. ac " altero diagridii aut gummi de gamandra acuatur. Doſis a 3ß. ad 3j. vel " 3ij. *Schrod.* p. 745. *Præparata* multa ſunt à p. 744. ad p. 749.

1. It is an acid ſalt; and although water can ſcarce diſſolve one twentieth part of its own weight of it, and that only when boiling hot, yet any alcaline or abſorbent ſubſtance renders it eaſily ſoluble, at leaſt if they be decocted together. If therefore the animal juices in the ſtomach and guts, as the bile, &c. aſſiſted by the natural heat, are ſufficient to diſſolve it, it will have the virtues aſſigned it; but if otherwiſe it will prove only eccoprotic. After long chewing the cryſtals of tartar I could obſerve only a mild acidity, no ſtypticity. "Ut ſolvatur penitus, exigit vigecuplum aquæ ebullientis, aut manet in fun-"do. . . In corpore humano, laborante bilioſo acri, putrido, ſummum eſt "corrigens: inde acutis proba medela. Purgat primas vias, vix turbans in-"teriora. Cum acri putrido, amiſſa acedine, in materiem facile ſolubilem "abit, tumque pulcherrimum exhibet remedium aperiens." *Boerh. Chem.* ii. p. 40. "The cryſtals require twenty-four times the weight of boiling water "to diſſolve in. . . . Lime water is an active menſtruum with regard to theſe "ſalts, and may be ſo managed as to diſſolve half its own weight." *Lewis's Pharm.* p. 70. "Tartarus ſalis ſpecies eſt . . . ſaporis ſubacris, acidi." *Dale*, p. 320. "Eſt guſtus acidioris quam fæx vini." *Boerh. Chem.* ii. 39. "Sa-"poris acidi grati." *Nucl. Belg.* p. 286. "Saporis acidi ſubauſteri." *Geoff.* ii. 758. So ſome of it ſolvitur in ore. The water in which cryſtalli Tartari have been diſſolved remains ſowriſh after it is cold, and the Tartar precipitated. Vide *Lemery's Chem.* p. 689. — 2. Crude tartar (ex gr. ℥xxxii.) conſiſts of air (℥x. ʒv. ℈j.) phlegm and ſpirit (℥viij.) oil (℥v.) acid ℥viij.) and of terreſtrial feculency (about ʒij. or ʒiij.) "By a chymical analyſis, Tartari optimi ℔ij "yielded phlegmatis ℥iv; ſpiritus ℥viij; olei ℥iij; carbonis ℔ij, (ſo that only "an ounce was loſt) whence ſalis alcali fixi ℥xij." *Lemery's Chym.* p. 699. But, according to *Mr. Hales*, one third part of Tartar is air. Vide *Stat. Exp.* i. 184. "Deſtillando Tartari optimi ℥xvj. elicitur vix aquæ ℥j, ſalis vero "ad ſummum ℥iiß: reſiduum totum eſt oleum: *i.e.* ex xvj. ſunt fere xiij. par-"tes oleoſæ," ſays *Helmont* (*Tria Chymicorum Princip.* p. 395. § 8.) "Dum "vini Tartarus crematur, vix ℥xvj. ejus dant ℥iiß. ſalis alkali; ergo ℥xiiiß. "volatiles calcinando periere." *Idem* (*Blaſhumanum*, p. 179. § 39.) But he is little to be truſted: for Tartari crudi ℥xvj. by calcination will yield ſalis alcali fixi ℥iv. *Lem. Chym.* p. 702. which, purified by calcination, ſolution, and filtration, give terræ ℈v. gr. v. *Ibid.* p. 703.

"Tartarus multum ſalis acidi continet & olei, tum tenuioris tum craſſi; "aliquantulum ſalis volatilis urinoſi diſtillatione ſuppeditat, & ſalis alcali fixi "portionem non mediocrem, cum terra, poſt diſtillationem in capite mortuo "relinquit. Verum ſal alcali, tum volatilis tum fixus, ignis fœtus eſſe videtur; "ſiquidem neque in Tartaro, neque in aliis mixtis corporibus hæ ſubſtantiæ "manifeſtas ſe præbent, niſi obſtetricante igne, vel artificiali in chymicis for-"nacibus, vel naturali in fermentationibus." *Geoff.* ii. p. 760. Hence—3. Tartar is a very ſafe medicine: for if it be not diſſolved in the primæ viæ, it only evacuates their contents, without weakening or diſturbing nature; and if the humors are ſo acrid or putrid as to diſſolve it, it corrects theſe qualities, conſequently allays thirſt, attenuates and gently evacuates; and may be of uſe in many diſeaſes, as in dropſies, aſthmas, colics, agues, &c. "A Sala (in "Tartarologia) de ſeipſo narrat, quod, cum paſſione colica multoties miſerrimè "diſcruciaretur, multis aliis medicamentis fruſtra tentatis, ſumpſit Tartari "pulverati

" pulverati ʒvj. ex quo purgatus fuit, & a cruciatibus ſolutus, tandemque " poſt idem aliquoties repetitum remedium, perfectè ſanatus fuit." *Geoff.* ii. 761. Vid. *Lewis's Pharm.* p. 71. who ſays *Sala*'s doſe was ʒij. But in the *N. Diſp.* it is ʒvj. Vide p. 217. where there is a miſtake relative to the preparing the cryſtals of Tartar at Montpelier.

SECT. III.

Tartar in powder, or its cryſtals, may be given, as an alterative, to ʒij; as a cathartic to ℥j, partitis vicibus rather than at once. The preparations are: 1. Cremor vel cryſtalli. 2. Tartarus ſolubilis. 3. Tartarus emeticus. 4. Tartarus vitriolatus. 5. Sal Tartari. And 6. Oleum Tartari per deliquium.

" The doſe is from ʒß. ad ʒiij. in any proper liquor." *Lem. Chym.* p. 688. " Exhibetur intus cremor Tartari, (*i. e.* cryſtalli quæ nunc in uſum ſervantur, " p. 759.) potius quam ipſum Tartarum, a ʒß. ad ʒij. ſi aperiendi tantum ſit " animus, vel cum aliis purgantibus ſtimuli vice permiſceatur: verum quando " abſque ullo alio additamento, aut ſtimulo, purgantis munere fungi debet, " ab ℥ß. ad ʒvj. aut ℥j. ſumitur." *Geoff.* ii. 761. But perhaps the Tartar, as containing little feculency, is not worſe, by no means hurtful, and probably more eaſily diſſolved: perhaps alſo ſomewhat may fly off in decocting. However it is ſeldom given crude.——I ſhall now examine the uſual preparations. And,

1. *Cremor Tartari offic.* & cryſtalli Tartari *offic.* Theſe are in diſtinct proceſſes in *Ph. Edinb.* p. 153 and 152: though the cream is not often kept, but the cryſtals are taken without any error, when either is preſcribed. So that cremor Tartari, cryſtalli Tartari, Tartarus purificatus or depuratus, & acidum Tartari, are ſynonymous. Yet the *London Diſpenſatory* gives the preparation of none of them; though ordered in Tartarus emeticus, & Tartarum ſolubile. The Tartari cryſtalli, that is Tartarum purificatum, ſtands only among the ſimples; not very properly in my judgment. As to the preparation; if the diſſolved Tartar paſs not eaſily through grey paper, Hippocrates's-ſleeve may ſerve: and what remains undiſſolved may be again diſſolved in more boiling water. Vide *Schrod.* p. 745.

2. *Tartarus ſolubilis, offic.* is Tartar ſaturated with its own or (according to the *Ph. Lond.*) any other fixed alcali, whereby it becomes a neutral and eaſily diſſolvable ſalt, more certainly attenuant, deobſtruent, diuretic, than the Tartar, and as laxative, but leſs antiſeptic. It is called alſo Tartarus tartariſatus, & ſal vegetabilis: and given to ʒij. as an alterative, and to ℥ß. or ℥j. as a purgative. It is called alſo balſamum ſamech Paracelſi, according to *Geoff.* ii. p. 767. V. N. B. p. 5983.

Tartarus ſolubilis of the *Ph. Edinb.* is thus made: " ℞ Cryſtallorum Tar- " tari q. v. coque ad perfectam ſolutionem, ex aquæ font. decuplo ſolutioni " bullienti inſtilla paulatim oleum Tartari p. d. q. s. *i. e.* donec ceſſet effer- " veſcentia liquor calidus adhuc filtratus evaporetur ad pelliculam ut cryſtalli " in frigore concreſcant." *N.* Inſtead of *decuplo* ſhould rather have been *vicecuplo* or *q. s.*——The *Ph. Lond.* for this preparation, diſſolves any fixed ſalt in boiling water, and throws in the cryſtals of Tartar (*in powder, adds Pemb.*) gradatim

gradatim (*omitted by Pemb.*) ſo long as any efferveſcentia (*fermentation, Pemb.*) is raiſed, which uſually ceaſes before thrice the weight of the alcali is thrown in: then filters the liquor, and cryſtalliſes, or evaporates to a maſs. Is ſalt of tartar no better than any other fixed alcali? Whether ought the alcali to be thrown into the acid, or the acid into the alcali? Is not crude Tartar as good here as the cryſtals?

There are many ways of making this preparation; for whatever can deſtroy the acidity of vinegar will make the Tartar ſoluble, if decocted with it in aquæ q. s. Thus Cretæ albæ p. i. is ſufficient for cryſt. Tartari p. ii. "Cryſtal. "Tartari ℥viij. & ſalis Tartari ℥iv. give Tartari ſolubilis ℥xj. ℥vj." *Lem. Chym.* p. 689. Is it thus alcaline? Is ℥ij. a part of the alcali or loſt? Vide *Mr. du Hamel's and Groſſe's experiments. Mem. Acad. an.* 1732. and *an.* 1733.

"An vero ſit jactatum Paracelſo remedium, quod ſamech vocaverat, cujus "ille ope narrat, omnia vulnera recentia, abſque ulla ſuppuratione, paucis "coire horis, non dixerim, &c." *Boerh. Chem.* ii. p. 265: where he notices its uſe as a menſtruum for lacca, myrrha, &c. and in ſeveral diſeaſes, as the ſtone, jaundice, ſpleen, &c.

3. *Tartarus emeticus, offic.* Vid. p. 324. vol. i.

4. *Tartarus regeneratus, offic.* is the ſalt of Tartar ſaturated with the ſpirit of vinegar into a neutral oily ſalt, or penetrating ſapo. It is much commended as a powerful reſolvent and deobſtruent, in obſtructions of the viſcera, and nerves; in cachexies, palſies, dropſies: and as a diuretic and cathartic. You have the proceſs for preparing it briefly in *our Pharm.* p. 155. and at great length in *Boerh. Chem.* ii. 266. It is at beſt, according to theſe, tedious and expenſive; but much more ſo Geoffroy's way. ii. 766. See *Lewis's Pharm.* 258. The *London* committee made ſome alterations on the proceſs; but at laſt threw it out, ſubſtituting for it their ſal diureticus. It is ſeldom made. Doſis ad ℥j.

To ſaturate ſalis Tart. p. i. requires aceti fortis ſtillatitii p. xiv. or more, by which the weight of the alcali is increaſed nine twentieth parts. "Solicito "Hombergiano labore patuit, pondus alcali auctum ab aceti acido, ſic at-"tracto, eſſe novem vigeſimas reſpectu alcali. Et acidum hoc, reſpectu aceti, "in aceto fuiſſe unam trigeſimam ſeptimam circiter partem totius. Reliquas "triginta ſex partes puram fuiſſe aquam. . . Vocavere hunc ſalem terram folia-"tam. . . . . Sal hic ſiccus in igne flammam capit; ſummo igne deſtillatus "oleum verum dat. (Is not the weight of the alcali increaſed by the oil in "the vinegar?) . . . Dubitavi ſæpe an non hic eſſet ſal Tartari volatilis reddi-"tus Helmontianus . . . . maxime cum & ceræ inſtar fluat ad ignem. Veterum "certe chemicorum acetum radicatum videtur habendum." *Boerh. Chem.* ii. p. 268.

5. *Tartarus vitriolatus offic.* Vide Vitriolum. p. 209. vol. i.

6. *Sal Tartari offic.* is an acrid, cauſtic, fixed alcali ſalt, extracted from calcined Tartar by diſſolving it in water, filtring and evaporating to dryneſs; and is an acrid, antacid, attenuant, reſolvent, diuretic, and cauſtic ſubſtance. It is recommended in all diſeaſes from acid, viſcid, phlegmatic, crude or cold humors or cauſes.

This is the ſtrongeſt of all the pure alcalies, and no ſubſtance whatſoever yields ſo much of it as does Tartar, although itſelf an acid. Tartar ℔j. dat ſalis

ſalis ʒiv. *Lem. Chym.* p. 702. It burns the tongue, or ſkin, like a hot iron; but, ſufficiently diluted, taſtes urinous; and makes animal juices fætid and volatile. I know none who has explained the nature of this and of all ſuch fixed alcalies near ſo well as our Boerhaave. "Dicta de virtute alcalium "(Chem. i. p. 764—803.) in corpora humana, compendio referam. 1. Aci- "dum omne ibi brevi deſtruunt; quia paucum, ſatis mite, nec niſi in primis "viis. 2. Si occurrunt acido efferveſcunt, flatus, ructus excitant, mobilitate "ſtimulant, in ſalem neutrum abeunt, qui dein innoxius, penetrabilis, ape- "riens, diaphoreticus, diureticus, antiſepticus, novos effectus præſtat. 3. Motu "hujus efferveſcentiæ nervos ſtimulant, ſpiritus movent, priores motus ner- "vorum & ſpirituum mutant: hinc ſpaſmos hypochondriacorum & hyſterica- "rum, hincque pendentes morbos ſæpe curant. 4. Attenuant quæ acido "coiverant: quare in coagulo lactis, prudenter data pulchra præſtant: alia "quoque tenacia ſolvunt ſatis feliciter. 5. Glutinoſa, oleoſa, pinguia, faciunt "attenuari, & aquæ commodius miſceri, unde deterſio: moderato igitur uſu "officinam chylopoieticam ſorde glutinoſa liberant. 6. Bilis quoque, lymphæ, "ſanguinis, ſeri coagula reſolvunt, vi vitæ introrſum admiſſa, atque ibidem "agitata. 7. Acri ſtimulo ſuo ſimul inertia movent, hincque urinam, ſudor- "em, ſalivam, movent: unde diaphoretici, diuretici, ſudoriferi cenſentur; "quin & alvum cient. 8. Igitur in morbis quibus ineſt iners, lenta, mucoſa, "pituita; acedo hinc alimenti vegetabilis in primis viis; auſteri aceſcentis "materia vel effectus coagulis manifeſti; abundans ſeri aquoſi colluvies; con- "cretum pingue, tenax, morbi hinc ſæpe orti, hydrops, icterus, leucophleg- "matia, podagra, rheumatiſmus, ſcorbutus, uſum habent eximium, ſi pru- "denter, bene diluti, doſi exigua, tempore idoneo, porriguntur. 9. Chi- "rurgis auxilia efficaciſſima præbent: cauſtica vi dum exurunt eſcharas pro "fonticulis faciendis; ulcera ſordida mundantur; corrupta per gangrænam "loca ſeparantur; verrucæ exſtirpantur. . . 10. Tandem ſcire eſt, pernicioſum "eſſe uſum horum ſalium, in omni morbo, in quo ſales nativi degenerare "incipiunt in naturam acrem, alcaleſcentem, putridam, volatilem; ubique "olea ſe diſponunt ad acrem, fœtidam, putridam, rancidam, volatilem in- "dolem, nidore exhalante, & urinæ colore rubro, manifeſtam; inprimis "autem exitiales ſunt, quoties fel evaſit tale, & quando humores nimis diſ- "ſoluti, fluidi, ſeptici, unde in peſte præſens fere venenum. Hinc ergo, in "inflammatione, ſuppuratione, gangræna, ſphacelo, febribus continuis, pu- "tridis, morbis a nimia velocitate pendentibus, omnino vitandus horum "uſus internus. 11. Cautus eſto uſurus, drachmam vigecuplo aquæ diluat, "hujuſque ultra drachmam ſimul vix aſſumat, repetatque ſolicitâ cum cau- "telâ." Thus *Boerh. Chem.* ii. p. 59. "Salis Tartari doſis a gr. xij. ad ʒß. "præſcribitur. Magna aquæ copia ſolvi debet." *Geoff.* ii. 764. I think it enough to give it to gr. v. in cochl. i. aquæ. For the uſe of this ſalt as a menſtruum conſult *Boerh. Chem.* l. c. and for the analyſis Tartari, p. 225.

Of ſal Tartari, (p. i.) and oil of turpentine, (p. ii.) artfully united, is made the ſapo tartareus, offic. *Ph. Edinb.* p. 155. about the right preparation of which authors widely differ, as well as with relation to its uſe. Compare the proceſſes; *Boerh. Chem.* ii. 261; *Wilſon's Chym.* p. 234; *Geoff. Mem. Acad.* 1725, &c. and ſee *Lewis's Pharm.* p. 260, and *Narrat. Pemb. Diſpenſ.* p. 106. The *Lond. Pharm.* has deſervedly thrown it out, and the pil. Matthæi, in which

which only it was uſed, along with it; ſubſtituting a better and more ſimple pacific in its place, *viz.* the *pilulæ ſaponaceæ*. Vide Opium.

7. Oleum Tartari per deliquium, ſeu liquamen ſalis Tartari, offic. is a ſalt of Tartar diſſolved by the moiſture it attracts from the air. It is called Lixivium Tartari in *Ph. Lond.* *Annon potius lixivia dicendum?* "Sal hic eſt "verus aquæ magnes, qui impatiens ſicci, aquam ex aëre trahit, cum eo "diſſolvitur, & decurrit in liquorem pinguem, quem oleum alcalinum per "deliquium vocant. Quod charta percolatum puriſſimum evadit, pondero- "ſiſſimum poſt oleum vitrioli, inter ſalina. Sed & acida in aëre vaga ſimul "trahuntur cum aqua in hoc alcali, id mutant, pro indole ſuâ, ut evadat "penitus alienus ſal, a priſtinâ ſuâ naturâ, accedatque ad ingenium ſalis, a "quo illud acidum fuerat natum. Si acidum ſulphuris in illo aëre prædomi- "natur, ibit in naturam Tartari vitriolati: ſi nitri, verget in nitri indolem: "ſi ſalis marini, ibidem ſalſum marinum generabit: ſi aceti halitus, tartarus "regeneratus: ſi olea valde attenuata locum replent, tum orietur ſaponis æmu- "lus ſal." *Boerh. Chem.* ii. 56.

N°. 10. Sal hic in oleum per deliquium verſus, iterum exſiccatus, fuſus "igne, rurſum aëris humido deliqueſcens, repetito hoc opere tandem in fæces "terreſtres, & volatile, reſolvitur." *Ibid.* p. 58.

MATE-

MATERIA MEDICA.

PART III.

Of Animal Substances.

LECTURE LXXVIII.

APES.

SECT. I.

APES, offic. *Schrod.* p. 859. *Aldrov. de Insect.* 20. *Ionst. Insect.* 1. *Monst. Inst.* 1. *Dale* 356. Apis, *Charlet. Exerc.* 36. Apis domestica seu vulgaris domestica, *R. H. Insect.* p. 240. Bees.—These are four-winged, six-footed and aculeated insects, which furnish us with honey and wax, which need no description.

The industry, curious œconomy and policy, of this wonderful and everywhere common little creature, have employed the attention and been the admiration of the learned in all ages. Many volumes have been written concerning them, and yet to this day the subject is not exhausted. Their cells were long ago demonstrated by the famous mathematician *Pappus Alexandrinus* (who flourished in the time of *Theodosius* the Great, *Imper. ab An. D.* 383. to 395.) to be of the most regular and every-way most convenient figure. And that these little architects have not only studied the beauty and usefulness, but also the strength, of their edifices, and the most frugal and thrifty way of erecting them, doing it at the least expence that possibly could be, the late *P. M'Laurin*, one of the greatest ornaments of our university, has sufficiently evinced. Vid. *Phil. Trans.* No. 471, for Nov. 1743. p. 565. or *Abridgment*, vol. ix. part 3. p. 2. *Of the bases of the Cells wherein the bees deposit their Honey, by* Mr. M'Laurin.

The very great and accurate *Joh. Swammerdam*, in his *Biblia Naturæ*, published by Boerhaave and Gaubius in Dutch and Latin at Leyden, in 1738, 3 vol. in folio, treats of bees in vol. ii. à p. 367 ad p. 550. And yet we are in the dark as to many things worth knowing concerning them.

" Apes distinguit Swammerdamius, in 1. Regem, seu verius reginam, si-
" quidem sequioris sexus est. 2. Fucos, qui masculi propriè sunt. 3. Apes
" operarias, quarum sexum distinguere non potuit." *R. Hist. Insect.* p. 240. Which is not altered in the *Biblia Naturæ*. The queen may well be considered as such, since she is the mother of all her subjects. Here is one wife for two, three, or I do not know how many, hundred husbands. A most numerous offspring, yet no coitus ever observed! *Quam magna & varia opera tua Domine!*

Mel, *offic.* honey is commonly known. Whether it is only collected, or also prepared, by the bees, that is whether it is more properly an animal or vegetable juice, is not so certain: but the last seems most probable. For certain it is that many (if not all) flowers, even of bitter herbs, *ex gr.* aloes, contain a sweet honey-juice, in which the bees seem much to delight; as they do also on the leaves of such trees as transude the same sort of juices, improperly called honey-dews. (α) Such juices the bees seem to feed on which are called the working bees, and to carry also what they have not present occasion for, in their stomachs, to their hives, for the provision of their sovereign and her husbands, so long as she has use for them; after which they are destroyed, that they consume not what their queen and they must live on during the winter. (β) If the honey of a hive be exhausted before the end of the winter, the whole swarm dies, unless they be fed with other honey, syrup, or some such sweet juice. (γ) The flavour of the flowers which abound most, in the country where the honey is made, is sometimes observable in it: as that of rosemary in the Narbon honey, of lime-tree flowers in the Lith, &c. " Aqua
" mellis odorem fundit mellis proprium, in quo sæpè fragrantia superstes
" florum, unde Apes collegerant." *Boerh. Chem.* ii. 165. Hence *Virgil* advises

" Hæc circum casiæ virides, & olentia latè
" Serpilla, & graviter spirantis copia thymbræ
" Floreat: irriguumque bibant violaria fontem." *Geor.* 4. v. 30.

And lastly (δ) Honey is acescent, and much a-kin to manna and saccharum; yet differing in several things from both.

Not only the seasons and soils have influence on the honey, but also the age of the hives, manner of separating it from the combs, as with or without heat or water. The best honey is altogether clean, of a fair yellowish white colour, or a little greenish; neither too hard nor too liquid, but thick and corny; and as agreeable to the taste and smell as may be; which if it be from hives of one year, which have never swarmed, it is called virgin honey, and will dissolve intirely in water without making it muddy. I have seen very white honey not near so sweet and pleasant to the taste as some very brown honey. Lemery says they have a way of counterfeiting the Narbon honey; and no doubt they can also artificially whiten it.

Cera, cera flava, *offic.* Common wax, is the substance of the honey-combs, remaining after the separating of the honey from them, refined by melting it in boiling water. Wax is thought never to enter the bodies of these insects; but only to be gathered, or brushed off of the surfaces of the leaves and flowers of vegetables, by their rough paws, with which, being formed into

little

little balls, they load their hinder legs; and thus carry it into their hives, and with it build and ſtrengthen their apartments. Bees are commonly obſerved to fly out of flowers, with a yellow duſt-like ſubſtance adhering to them, which is thought to be the powder of the apices. But, according to *Mr. Geoffroy*, *Mem. Acad. An.* 1711. "theſe little grains of the apices do not diſ-"ſolve in oil-olive, oil of turpentine, nor ſpirit of wine: though they draw "a tincture from them, they change little of the figure of their grains; nei-"ther do they melt in boiling water nor in the fire, in which laſt they burn to "a carbo, without melting; ſo are not wax." But farther,

Although wax is a reſinous ſubſtance, very inflammable, melting and conſuming intirely in the fire, without leaving any aſhes behind it, diſſolving eaſily in oils, yet "it is not ſoluble in ſpirit of wine; boiled in it, it (only) "loſing its yellow colour, becomes white, and of a ſofter conſiſtence." *Lewis's Pharm.* p. 72. And in its chemical analyſis, it differs ſo widely from all purely vegetable ſulphurs known, that it ſeems to owe more to the inſect than ſimple collection.

Cera alba *offic.* is yellow wax purified and whitened by repeated meltings, and the influence of the ſun and air on it, when reduced into thin plates, or into ſmall grains, by pouring it melted into cold water. vide *Sav. Dict.* vol. ii. 765. & *vol.* iii. *col.* 180—192. Common yellow wax ſoon turns whitiſh on its ſurface in the common air: the yellower therefore wax is, it is the freſher, if genuine.

The conſumption of wax is prodigious. "There were, preceeding 1688, "imported to Marſeilles from Provence, Barbary, and the Levant, yearly, "between 350,000 and 400,000 pounds weight of it." *Sav. Dict.* iii. 451; beſides vaſt quantities made in other provinces of France; and alſo imported from Holland, Dantzick, &c. Hence you may judge of the quantity of honey made by, and the uſefulneſs of, this induſtrious little creature.

"Propolis (προπολις) uſurpanda flava, odorata, ſtyracem referens, in ſum-"ma ariditate mollis & maſtiches modo ductilis. Vim autem obtinet vehe-"menter excalfaciendi, attrahendi, & aculeos quoque corpori infixos ex-"trahendi. Sed & in veteri tuſſi ſuffito auxiliatur, & lichenas impoſita "tollit. Cæterum circa alvearium oſcula reperitur. Ceræ natura ſimilis." *Dioſcor.* l. 2. c. 106. Et hoc totum eſt quod de propoli habet. "Propolis "craſſioris jam materiæ, additis floribus, nondum tamen cera, ſed favorum "ſtabilimentum, quo omnes frigoris aut injuriæ aditus obſtruuntur: odore "& ipſa etiamnum gravi, ut qua plerique pro Galbano utantur." *Plin.* l. 11. c. 7. "Propolis extergentis non ita valentis eſt facultatis, cæterum admodum "valenter attrahentis: eſt enim eſſentia tenuium partium. Porro excalfacit "ordine 2. completo, aut 3. incipiente." *Galen Simpl.* l. 8. fol. 59. B. Oribaſius, Aetius, Paulus, only copy Galen. *Scribonius Largus* ſays, "Quidam "ceram ſacram vocant." *fol.* 206. D. The moderns copy the ancients. I know little about it; it is never kept here, and I believe uſed no-where. Vide, ſi placet, *Schroder* 861. *Dale* 356. *Lem. Dict.* p. 442.

SECT. II.

Bees are called attenuant and diuretic, and commended in dropſies and nephritic pains; and outwardly for baldneſs, to make hair grow: but are little uſed.

Honey is diluent, detergent, emollient, and antiſeptic; and alſo nouriſhing; called pectoral, diuretic, laxative, and vulnerary; and commended inwardly in coughs, conſumptions, aſthmas, contuſions, internal ulcers, heat of urine, ſore mouths, &c. and outwardly as deterſive, for ulcers, &c. *Cum ſaccharo convenit.*

Wax is antiſeptic, anodyne, balſamic, and digeſtive; called diuretic and nervine; and commended by ſome (ſays *Herm. Cyn.* 717.) in fluxu alvi, & ictero. But it is little uſed internally, except in balſ. Locatelli: outwardly it is much uſed in ointments, cerates, and plaiſters.

" Apes ſiccæ & contritæ, inunctis alopeciis, capillum reſtituunt. Mel " calidum ac ſiccum ſtatuitur gr. 2. (albicans tamen minus calidum cenſetur.) " Nutrit, abſtergit, aperit, pulmonibus convenit, urinam ciet, tuſſi medetur, " putredini reſiſtit. Extrinſecus oculorum caliginem diſcutit, aliiſque eorum " affectibus ſuccurrit. *Cautio.* Mel quia facile bileſcit, epati, calidioribuſ- " que corporibus non adeo proficuum eſt. Mel crudum alvum inflat, tuſſim " laceſſit, faſtidium creat. *Præp.* 1. Mel depuratum. 2. Mel deſtillatum, " unde aqua, ſpiritus, oleum, &c. Cera, medium quodammodo tenet cal- " facientium, refrigerantium, humectantium & deſiccantium, ita tamen, ut " ad caliditatem inclinet, partium quadantenus eſt craſſarum & emplaſticarum, " ideoque digerit, maturat, &c. N. adeo uſitata officinis eſt ut vix empla- " ſtrum reperias, cujus non exhibeat conſiſtentiam. *Præp.* 1. Oleum ceræ: " diureticum eſt daturque intrinſecus, doſ. gut. iii. iv. v. 2. Balſamus vul- " nerarius. 3. Magiſterium ceræ." *Schroder* 861, 862.

It may be obſerved of animal ſubſtances in general: 1. That they naturally tend to putrefaction, if juicy, which heat accelerates; and when putrid are acrid and alcaline. 2. That though they agree in many things, yet there is alſo diſcoverable by our ſenſes a conſiderable difference among them: thus ſome are ſoft, inſipid, or ſweet to the taſte; others bitter, acrid, cauſtic: ſome have no ſcent; others are ſtrongly odoriferous, perfumed, or fœtid: ſome parts of animals differ little from abſorbent earths; and are very fixed; others are very volatile. 3. By a chemical analyſis much the ſame principles can be got from every animal, though not always in the ſame proportions. " Ex analyſi " chemica partium animalium conſtat derivari inde poſſe. 1. Spiritum quen- " dam ſubfœtidum, volatilem, tenuem, aqua miſtum, difficulter ab aqua " ſeparabilem. 2. Aquam ſatis puritate accedentem ad elementalem, niſi " quod ſpiritum illum vix unquam queat dimittere. 3. Salem alcalinum vo- " latilem. 4. Oleum tenue volatile. 5. Oleum craſſius. 6. Terram ubique " eandem. 7. Phoſphorum & in eo acidum fortè ponderoſum. 8. Salem " marinum, ubi is in cibo potuque fuit aſſumptus, non aliter." *Boerh. Chem.* ii. p. 376. Now

Bees are eaten by little birds, ſo ſeem not to be acrid in any part, except in the virus they convey by their ſting, which perhaps would not hurt the ſtomach.

ſtomach. They feed on a variety of fine vegetable juices, and ſo may, perhaps, have very great ſpecific virtues: but if there be any ſuch virtues in them, they are not known; ſo that bees are little uſed. What effect can they have in baldneſs?

1. Honey is very ſweet, viſcid, ſcarcely aromatic; it diſſolves in water, ſpirits and oils; flames in the fire; eaſily ferments into wine or vinegar, and ſo yields either an inflammable or acid ſpirit by diſtillation. It diſſolves alſo oils and roſins, and renders them permiſceable with water. Hence it agrees with ſugar in many things. — 2. "Chymically analyſed mellis ℔iv. (of ʒxvj. each) "gave phlegmatis ſubacidi ʒxxv; ſpiritus fuſco-rubicundi, ſaporis acidi ac "acris ʒxij. and along with it olei fœtidi nigri parum; & carbonis ʒxxv. "(ſo loſt ʒiij.) which, calcined ten hours, loſt but ʒv. or vj. and yielded ſalis "fixi ʒiß. and the reſiduum, again calcined, contained ſome particles which "a magnetic knife attracted." *Lem. Chym.* p. 871. *vid.* Manna. "Mellis "Narbon. ℔ij. gave phleg. ʒx, ſpiritus ʒxij, olei ʒij, carbonis ʒvij. ʒvj. "(undè were loſt ʒij.) whence were got ſalis fixi gr. xv. circiter," according to *Lemery*, *Mem. Acad.* 1706. p. 352. — 3. Honey has been much uſed in food, as well as medicine, in all ages; but much leſs, ſince ſugar became ſo common, than formerly. "Mel calidum & ſiccum eſt, ſi ſincerum; "cum aqua vero humectat, & bilioſis alvum dejicit, pituitoſis autem ſiſtit." *Hippoc. de Diæta*, l. 2. p. 529. *lin.* 54.

"Mel vim habet ſmecticam, anaſtomoticam, humores evocantem: qua ra-"tione in ſordida ulcera ſinuſque commodè infunditur." (He commends it for tetters, with alum; pains & tinitus aurium, with ſalt; for lice and nits to kill them; inflammations of throat and tonſils; dimneſs of the eyes, &c.) "Urinas quoque ciet, tuſſique auxiliatur, & iis quos ſerpentes momorderint: "itemque contra hauſtum meconium, ſi cum roſaceo calidum aſſumatur. "Quin & contra fungorum maleficia, & rabioſi canis morſus, delinctum "potumve proficit. Attamen crudum alvum inflat, & tuſſim irritat: qua "de cauſa deſpumato utendum eſt." *Dioſc.* l. 2. c. 101. p. 121.

Honey gives, to ſome, ſevere pains in the ſtomach, and colics, though taken in never ſo ſmall a quantity: which can neither be attributed to its acid, nor to its fermenting, or generating air; ſince ſugar has no ſuch effect, and honey has it only on a few. Whether deſpumation will prevent it, I never tried; but I found nothing but vomiting could cure it. This quality it has from the bees.

1. Wax has no acrimony, is a ſingular kind of roſin agreeing in ſome things with lacca, and probably is as difficultly digeſted. For 2. By a chemical analyſis nothing can be got from it, but an acid fetid ſpirit, and oil, which at firſt, when cold, takes the form of butter, and ſo is called butyrum ceræ; but, by repeated diſtillations, more and more acid ſpirit ſeparating, it becomes a fluid oil. "Ceræ ʒxvj. yield only olei ʒiiiß; all the reſt is ſowriſh water, "which muſt weigh ʒxiiß." (true, if nothing evaporates during the proceſs) "no dry ſalt, no earth can be ſeparated from it." vide *Hiſt. Acad.* 1708. p. 64. *Lem. Chym.* p. 872. *Boerh. Chem.* ii. 154. "Eſt converſio hæc ceræ in buty-"rum conſtans: nam inde tempore diuturno, non naſcitur iterum cera dura, "ſed manet ſemper hoc butyrum molle, vel in ſummo frigore. Id expertus "loquor. . . Quum liquidiſſimum terebinthinæ oleum, citò in ſpiſſitudinem "terebin-

" terebinthinæ liquidæ redeat." *Boerh. Chem.* ii. 156. This butter and oil is much commended for fixed pains, contractions of the nerves, chapt lips, mammæ, &c. " In curandis fiſſuris labiorum hybernis, in fiſſuris papillarum " in lactantibus, in digitorum manuumque rhagadibus, vix aliud habet ſimile " ſi ſubinde levi illitu applicatur." *Boerh. Chem.* ii. 157. " Oleum ceræ cica- " triſans eſt ſummum, citiſſimè ulcera carne replet. Internè colicos dolores " ſedat, flatus diſcutit. Doſis a gut. i. ad viij." *Le Mort. Col. Chym.* p. 144. It probably relaxes, or ſoftens the fibres; and thus proves anodyne. I can expect nothing elſe from it.

SECT. III.

The doſe of honey need not be determined; and I am not for giving wax inwardly. Is mel mercuriale ever rightly made? Mel roſatum is a good medicine. Honey is an ingredient in the oxymel pectorale, ox. ſcilliticum, & ox. ſimplex, electuarium lenitivum, mithridatium, theriaca, ther. *Edinenſis*, pilulæ mercuriales utræque, trochiſci cypheos, & unguentum Ægyptiacum: and wax in the balſ. Locatelli, electuarium antidyſentericum, unguentum album utrumque, ung. antipſoricum utrumque, U. baſilicon, U. è lapide calaminari, U. deſiccativum rubrum, U. dialthææ, U. diapompholigos, U. epiſpaſticum, U. populeon, U. ſambucinum, U. ſaturninum, U. tutiæ, & U. vermifugum; in the emplaſtrum antihyſtericum, E. cephalicum, E. defenſivum, E. diachylon cum gummi, E. epiſpaſticum compoſitum, E. è meliloto, E. ſtomachicum, E. oxycroceum, *Pharm. Edinb.* 1744. wherein is alſo oleum ceræ.

" Ludovicus Locatellus natus eſt Bergami; chymicus egregius; & Me- " diolani practicus celeberrimus, ubi arcana plurima ægris ſalutaria compoſuit, " & chymici famigeratiſſimi nomen acquiſivit. Genuæ tandem, contagio " graſſante, obiit. A.C. 1657. nondum ſenex." *Lind. renov.* p. 764. A very arcanum monger!

" *Apes præparatæ.* Apes vaſi idoneo incluſæ ſiccentur calore leniſſimo." *Ph. Edinb.* p. 31.

ASELLI.

SECT. I.

Aſelli, Millipedæ, Oniſci, *offic.* Aſelli, *Ionſ. Inſect.* 126. Aſellus, *Mouf.* 202. *Charlet. Ex.* 57. Oniſcus ſive Aſellus, *Aldrov. Inſect.* 632. Aſellus. A ſow, tylers-louſe, thurſ-louſe, cheeſe-bug, cheeſe-lip; *Mouf. Merr. pin.* 203. Aſellus lividus major. *R. Hiſt. Inſect.* p. 42. Aſelli, Millepedes, Oniſci, *off.* Wood-lice, Sows, or Church-bugs, *Dale*, p. 354. *Vulgo* Millepeds, or Slaters.—Theſe are ſmall, many-footed inſects, with a callous jointed back, of a dark livid colour, of a ſweetiſh taſte, and ſmell ſomewhat fetid.

It is very common in old walls, under ſtones, &c. almoſt every where. Aſelli, ὀνισκοι, & ὄνοι, a colore aſinino: they are called alſo porcelliones. Some diſtinguiſh between Aſelli and Millepedæ: *Pliny*'s Millepedæ differing from *Dioſcorides*'s ὄνοι.

" Millepedæ (ὄνοι) quæ ſub vaſis aquariis reperiuntur, animalcula ſunt " multorum pedum, quæ quidem contacta manibus in globulos ſe contra- " hunt. Hæ ex vino potæ urinæ difficultati ac ictero auxiliantur. Illitæ " vero cum melle angina correptis proſunt. Tritæ & in cortice mali punici, " addito roſaceo, calfactæ, ad dentium dolorem (ὠταλγιαν) efficaciter inſtil- " lantur." *Dioſcor.* l. 2. c. 37. p. 98. " Millepeda, ab aliis centipeda, aut " multipeda dicta, animal eſt è vermibus terræ piloſum, multis pedibus arcu- " atim repens, tactuque contrahens ſe, Oniſcon Græci vocant, alii tylon: effi- " caciter ſanat aurium dolores, &c." *Plin.* l. 29. c. 6. p. 730. lin. 23. " Confundit Oniſcorum hiſtoriam, cum deſcriptione Millepedæ, &c." Vide *Dalecampium* in locum Plinii citatum.

SECT. II.

They are antacid and attenuant; called deobſtruent, diuretic, and lithontriptic; and commended in the aſthma, jaundice, nephritic pains, colic, convulſions, rheumatiſm, hæmorrhoids, ſcrophulæ, cancers, &c. and what not.

" Aſelli tenuium partium ſunt, digerunt, extenuant, abſtergunt, aperiunt. " Hinc utilitatis peculiaris ſunt in mucilagine tartarea reſolvenda, calculoque " ad mucilaginem reducendo, in obſtructionibus viſcerum aperiendis, adeo- " que in morbo regio, in dolore nephritico, difficultate urinæ, in colica, ap- " petituque ob ventriculi mucilaginem, imminuto, in aſthmate, &c. Ex- " trinſecus commendatur pulvis ad affectus oculorum, ad aurium dolores, & " anginam (cum melle illitus). Vivus impoſitus phagedænam perimit. Doſis " a ℈j. ad ʒj. *N.* 1. Non facile ℈j. tranſcendo, nec uſum continuo, nimia " quippe reſolvendi vi, incommoda non parva inferre poſſunt. *N.* 2. Ut locus " natalis ſaxoſus, indicat ad calculum Aſellos facere; ita indicante aptitudine " & propenſione ſeſe contrahendi, ad convulſiones forſan non eſſent inutiles." *Schrod.* p. 863.

1. They are not acrid. " Multipedæ ſunt parva animalcula, inter lapides " antiquorum ædificiorum degentia, in dorſo ſquamoſa & fuſca, in ventre co- " loris cinericei, habentia ſeptem paria pedum, odoris ingrati & fœtidi; ſapo- " ris nitroſo-urinoſi." *Nucl. Belg.* 197. " Millepedes have a faint diſagree- " able ſmell, and a ſomewhat pungent ſweetiſh nauſeous taſte." *New Diſp.* p. 162. They afford the ſame chymical principles with vipers, and other animals. " The carbo, remaining after the diſtillation of Millepeds, being " calcined, Mr. Lemery found ſome iron in the aſhes. He found it alſo in " the aſhes of other animal ſubſtances, but not always. C.C.C. ivory, oculi " cancrorum, oyſter-ſhells, did not yield it: whereas he always diſcovered it " in the aſhes of vegetables." *Hiſt. Acad.* (*Edit. Paris*) 1709. p. 39. No fixed alcali, no nitre, were got from them; although the Academy attributes their virtues to a nitrous ſalt, on which they feed, " on the roofs of houſes, " in caves, chinks of walls, and in moiſt and nitrous places, where they are " found." I fear nitre would rather poiſon than nouriſh them. But—2. They do not appear to be cooling. " Millepedes ſanguinem calefaciunt. . . . " Valent ad arenulas, hydropem, icterum, ſcrophulas, aſthma, tuſſim, phthi- " ſim incipientem, cancrum, viſus debilitatem, & ad cutis venuſtatem, colo-

" remque

" remque faciei elegantem conſervandum & renovandum. Audivi, ſed non-
" dum ſatis expertus ſum, Millepedes veſpere crebriùs & copiosè exhibitas,
" urinæ acrimoniam excitare, ejuſque remedium adæquatum eſſe balſamum
" capivi." *Fuller, Ph. Ext.* Expr. Millepedum. They are certainly putreſ-
cent. — 3. They are wonderfully commended in too many diſeaſes; as in the
ſtone, cachexy, tympanitis, ſpleen, vapours, tuſſis, convulſiva, palſy, head-
ach, ſcurvy, arthritis vaga, tumors, wounds, ulcers, &c. (*vide quæ ſupra*).
" Centum Aſelli mediocres, utplurimum unciam pendent." Vide *Boecleri Cyn.*
p. 774—780. ſi placet. " Their deterſive qualities ſcour even the minuteſt
" paſſages, and keep the nerves clean . . . whereby they are good in palſies,
" epilepſies, and all nervous diſtempers. And likewiſe becauſe they open,
" and as it were by their minuteneſs and aſperities cut their way through any
" obſtructions, they are good in ſtrumas, ſcrophulous tumors, and inveterate
" ulcers." Thus (learnedly) *Quincy, Pharm.* p. 151. " Whether they have
" any juſt title to theſe virtues, is greatly to be doubted: thus much is cer-
" tain, that their real effects come far ſhort of the character uſually given
" them." *N. Diſp.* p. 162. And—4. Though the doſe is commonly made
to ʒj. yet *Schroder* dares not exceed ℈j, nor continue even the uſe of ſo much.
Etmuller ſeems to agree with him. *Nucl. Belg.* goes the length of ℈ij. But
Fuller gives ʒß. yea, No. 50. twice a day (quotidiè). Upon the whole I think
there is reaſon to think Millepedarum ℈j. is good for nothing; and ʒß. not
much worth.

They may be given to ʒj. and upwards; are prepared by exſiccation; and
give name to a wine. " The beſt way of taking the Millepedes certainly
" is the ſwallowing them alive;" according to the editor of Pomet, ii. 57:
though this is rather the worſt way. They are taken in powder, bruiſed in
wine; or any other way.

LECTURE LXXIX.

BUFO.

SECT. I.

BUFO, *offic.* Bufo, *Aldrov. Quad. Ovip.* 609. *Ionſ. Quad.* 131. *Charlet.*
Exerc. 27. Bufo terreſtris major, *Schwen. Rept.* 159. Rana rubeta tum
paluſtris tum terreſtris, *Geſner Quad. Ovip.* 64. Bufo ſeu Rubeta. *R. Syn.*
Quad. p. 252. The Toad.

" Magnitudine ranam ſuperat: corpore eſt craſſo, dorſo lato, ventre turgido
" & inflato, unde ob gravitatem ſaltare vix poteſt; cute, ut aiunt, denſiſſima,
" & tuberculis inæquali. Colore lurido & nigricante, & in ventre maculoſo,
" naturæ quodam inſtructu horrorem aſpicientibus incutit; ipſoque vultu &
" inceſſu, & locis in quibus ſtabulatur opacis, concavis, ſqualidis & putridis,
" malignum & noxium ſe eſſe fatetur. . . . Exiſtimo enim, naturam nobis
" venenatorum & nocivorum animalium metum ingeneraſſe. Quis enim ad
" ſerpentes, etiam primum viſi, aſpectum non totus cohorreſcit, & ſe ſub-
" ducit?" *R. Syn. Quadrup.* p. 252.

It is ſaid to feed on the earth, by ſome; on inſects (particularly bees) by others: I could never diſcover what it lived on. It is ſaid alſo to poiſon plants, particularly ſage, ſometimes, by its ſaliva and urine; and to ſquirt out its noxious urine in its own defence; which ſwells the part it touches, and cauſes ſymptoms ſomething like ſuch as follow the ſting of a ſcorpion. "We find "not toads ſo venomous in our temperate climate as in hot countries." *Lem. Dict.* p. 91. I doubt of their being any way poiſonous here. How the male toad proves midwife to the female, ſee in *Hiſt. Acad.* an. 1741. p. 39—43.

SECT. II.

It is called diuretic, ſudorific, and alexipharmic; and commended inwardly in obſtructions of urine, dropſy, peſtilence, &c. And outwardly applied it is ſaid to provoke urine, cure carbuncles, ſtop hæmorrhages, &c. Imagination ſometimes cures, ſometimes kills. *Nihil affirmo.*

"Etſi animal ſit deterrimum venenoſum, ac abominabile, attamen non ef-"fugit uſum medicum. Internè pulvere ejus hydropicorum aquas per uri-"nam educi, deſperatus quidam expertus eſt hydropicus, qui præter ſpem "attentatæ necis ſanitatem illo acquiſivit. Doſis ʒß. (*N.* mallem ego mi-"norem.) Extrinſecus imponitur, parte qua venter eſt, anthracibus, ad eli-"ciendum *ſc.* venenum. Ingreditur itidem amuleta, aëri contagioſo arcendo "dicata; hæmorrhagiam narium, certo experimento ſiſtit. Idem & pulvis "cinis præſtare perhibetur. Renibus impoſitus aquam inter cutem per uri-"nam pellere dicitur, umbilico alligatus, fluxus hyſtericos retrahit & inhibet. "Plantis pedum appoſitus, capitis, cordiſque morbis, phrenitidi, febribuſque "ſuccurrere ſtatuitur. *Præp.* 1. Amuleta varia. 2. Pulvis (mallem equidem "bufones incineratos). 3. Sal ex cineribus. 4. Oleum coctum. 5. Oleum "compoſitum." *Schrod.* p. 796.

1. I have ſeen toads handled without any prejudice done by them; and have heard many credible accounts of their having been eaten in part, and that raw, *ſine noxa*; beſides what is related of the Braſilians, &c. in America: as alſo of their being applied alive to the loins in obſtinate obſtructions of urine, and that too with ſucceſs, and without any ill effect. If their urine inflames and ulcerates the ſkin, as it is ſaid to do, it would be obſerved in ſuch caſes, where the animal is forcibly detained upon a part. "In inſula Peragua Hiſ-"panos coctos bufones, fame premente, ediſſe Petrus Martyr author eſt. "Lerius Braſilianos minime exenteratis & toſtis veſci prodidit." *Ionſ. Quad.* p. 133. "Obſervatione dignum eſt quod ſibi experientia compertum eſſe "teſtantur Wierus & Varignana, bufonem per ventrem ſectum, & renibus "alligatum, aquas hydropicorum per urinam educere." *Hoffm. in Schrod.* p. 591. *Van Helmont* explains this. "Authores aliquot commendant bufones vivos, "utrimque renibus alligatos, ſolvere hydropem per lotium. Saltem vidi ruſ-"ticum hydropicum ſanatum, alligata anguium ſenecta per ventrem & renes. "Inducitur nempe idea metus renibus qua indignationem amittant." *Ignot.* "*Hydrops.* p. 494. § 36. And the effect of ſuch applications on the mind, the apprehenſion, fear, and horror our natural averſion to them excites, may produce wonderful changes, and why not ſometimes cure as well as kill.

Some die for fear, others bepiſs themſelves. About the year 1700 ſome fooliſh youths gave a man, for dried beef, ſome fleſh cut out of a malefactor's hips, who had hung ſome years in chains: he broiled and eat it; and probably had received no injury from it, if they had not, ſome time after, told him what it was: but ſo ſoon as he knew it, he fell into a vomiting which, as is ſaid, continued till he died. — 2. What is commonly ſaid of the virulency of this animal is copied from the ancients. "Tum Rubeta, tum etiam "rana paluſtris (φρυνος ἡ βατραχος ἑλειος) aſſumpta corporis tumorem ciet, "cum intenſo pallore, qui buxi colorem imitatur: accedit ſpirandi difficultas, "& gravis halitus oris ſingultuſque, ac interdum invita genituræ profuſio "conſequitur. His qui ſumpſere facilè ſuccurritur ſecundum vomitionem "largiore meri potu, & arundinis radicis ʒij, aut cyperi totidem. Cogendi "quoque ſunt ut vehementi ambulatione incitatoque curſu corpus exerceant, "ob torporem qui ex hoc malo naſcitur. Quinetiam quotidie lavandi ſunt." *Dioſcor. Alexiph.* c. 31. p. 413. Vid. *Aët. Serm.* 13. p. 641. c. 54. *Pauli*, l. 5. c. 35. p. 546. Whatever averſion we may have to vipers, their fleſh has nothing hurtful in it. I reckon the ſame holds in toads. But— 3. Is not the powder of a dried or burnt toad ſtrongly diuretic and ſudorific? The manner how the diuretic virtue of this animal came to be diſcovered makes me a little ſuſpect it. "Specialiter autem commendatur Bufo ad hydropem; qua de re "ſequentem Solenander in conſiliis refert hiſtoriam. Decubuerat Romæ hy"dropicus quidam, cujus uxor, ſumptuum tandem pertæſa, veneno illum "tollere malitioſe ſtatuit, quare Bufones in olla uſti pulverem ægroto inſcio "propinat, unde ille copioſum reddidit lotium; hinc denuo eundem pulverem "exhibet, ut citius ærumnoſam ſumptuoſamque vitam cum præcipite com"mutaret morte. Qui vero uberiore exonerata per veſicam ſaburra aquea, "præter conjugis expectationem, convaluit." *Boecler. Cyn.* 1. p. 787. "Ce"lebris eſt hiſtoria apud Jo. Wierum, l. 3. de præſtigiis dæmonum, c. 3. "cujuſdam hydropici, cui cum pulvis Bufonis in olla uſti, ab uxore mala of"feretur, copioſo reddito lotio, & ventre ab aquâ exonerato per veſicam, "convaluit: unde inſigne diureticum audit. In peſte Anglicâ Londinenſi "an. 1665. pulverem Bufonem exſiccatorum ad ʒß. exhibitum, ſummè pro"ficuum experti ſunt medici ſæpius repetitum, ſudori ſemper injuncto." *Hoffm. in Schrod. Mang.* p. 591. *N. B.* "It was firſt introduced into medicine "upon occaſion of a cure performed on a hydropic perſon; who, having taken "powdered toads in order to diſpatch himſelf, voided a large quantity of urine, "and ſoon after recovered of his diſorder." *New Diſp.* p. 109. Wierus's ſtory is related by ſeveral others; perhaps all from him; though not very credible. The author ſeems to have ſeen ſome faulty *M.S.* taken from my lectures: for I obſerve ſeveral things in him which he could have no where elſe. Vid. *River.* l. xi. c. 6. p. 331; "*Jo. Wierus de præſtigiis dæmonum & incantationibus* "*ac veneficiis, lib.* v. *Baſiliæ* 1684. 8vo." *Lind. renov.* 702; & "*Reinerus Sole*"*nander conſiliorum medicinalium, ſect.* v. *Francof.* 1596. *fol. quarum prima ante* "*annos* 38. *edita Lugduni cum conſiliis Jo. Montani in* 16." *Ibid.* p. 984. I find nothing of the uſe of the pulvis Bufonum in *Sydenham.* However— 4. Toads are commended many ways. Bates ſays of his pulvis Æthiopicus, made of toads burnt alive, (horrid!) "Doſis ʒß. vel ultra, in variolis, &c. "vel in moribundis auxilio certe fuit." Oleum Bufonum is ſaid to be good

for the dropſy and ſcrophula outwardly; ſp. vini, or wine in which ſome Toads have been drowned, to be an egregium & expertiſſimum alexipharmacum, inwardly; wonderful amulets to be made of the creature itſelf; and what not. Our *Pharm.* edit. 1735. adopted *Bates's pulvis Æthiopicus*, by the name of *Bufo præparatus*, which is retained in the edition 1744. All the favour I aſk for theſe innocent (though not very lovely) animals is to kill them before they are burnt; a favour never denied to the greateſt criminals; for I can aſſure you the powder will be nothing the worſe for it. But now poor Bufo is diſmiſſed ſafe.

" Paucum venenum habere Bufones & mite ſcripſit Albertus." *Ionſ. Quad.* " p. 133. " Bufo vivus aſſumptus, vel ſaliva, urina, aut ſanguis ejus, in- " ferunt ſymptomata lethalia; exenteratus, ſiccatus, vel calcinatus, diureti- " cum præbet validiſſimum, conducens ad hydropem; vi etiam pollet alexi- " pharmaca & ſudorifera, prodeſtque in morbis malignis. Doſis eſt ad 3j. " Externè adhibetur in amuletis contra peſtem, & applicatur renibus ad pro- " movendam urinam, item capiti, ad dolorem ejus chronicum, & maniam. " Oleum ejus per coctionem medetur ſtrumis: cinis ejus fiſtulas ſanat, & " ulcera ſordida." *Nucl. Belg.* 50. *Verbo*, its diuretic virtue ſeems to be founded on a fable; its alexipharmic on its ſuppoſed virulency; and any real effects it has on apprehenſion. Is not a burnt mouſe as good as a burnt Toad? *Vid.* Arſenicum & Hermodact. for amulets.

CANTHARIDES.

SECT. I.

Cantharides *offic.* Cantharis major, *Ionſ. Inſect.* p. 76. *Aldrov. Inſect.* 476. Cantharides, *Mouf. Inſect.* 144. Cantharis Dioſcoridis, *Charlet. Inſect.* 47. Cantharides vulgares officinarum, *R. Hiſt. Inſect.* 101. Spaniſh Flies—are of a ſhining green colour, or greeniſh-gold colour, about nine lines long, and two broad, in the body; of little taſte at firſt, afterwards acrid and cauſtic; and of a fetid ſmell while recent.

" Sunt animalia oblonga, alata, parva, vaginipennia, aureo colore viridan- " tia; ſaporis primo nullius, hinc acerrimi, picei, cauſtici, erodentis; odoris " cum recentes ſunt fœtidiſſimi. Inveniuntur maxime in regionibus calidi- " oribus, Hiſpania, Gallia, etiam in Germania ſuper cynogloſſam ... ut plu- " rimum gaudent fraxino, ut & liguſtro." *Herm. Cyn. par.* ii. p. 55.

They are common in France, Spain, Italy, &c. found on corns, roſes, aſh-trees, &c. They ought to be well dried, intire, as little broken or duſty as poſſible, that is as recent as may be. " Perimuntur aceti acerrimi vapore, " qui dum fervet exhalat. Hinc ſiccantur, & ſervantur per biennium." *Schrod.* 865.

" Cantharides quæ in frumentis leguntur, ad recondendum idoneæ ſunt. " Eas in vas, non piceatum immittito, ac ipſius oſculum raro puroque linteo " obligatum, circumvertito ad vaporem ferventis aceti quam acerrimi, tandiu- " que inverſum fictile contineto, donec illæ ſuffocentur, tum lino transfixas re- " ponito. Porrò efficaciſſimæ ſunt quæ variæ viſuntur, luteaſque habent in

" pennis tranſverſas lineas, quæque oblongo ſunt corpore, craſſæ, & blatta-
" rum modo, præpingues, ſed inefficaces & imbecillæ quæ unius ſunt coloris."
Dioſcor. l. 2. c. 65. p. 102. " Simili modo reponuntur & bupreſtes è can-
" tharidum genere, & pityocampæ. . . Vis ipſarum, communis ſeptica, exul-
" ceratoria & excalfactoria qua de cauſa medicamentis admiſcentur, quibus
" carcinomata, lepræ & impetigines feræ curantur. Menſes quoque cient,
" peſſis emollientibus additæ. Porro nonnulli cantharidas antidotis admiſtas,
" etiam hydropicis auxiliari prodiderunt, quippe quæ urinas moveant. Alii
" ipſarum alas & pedes, iis quæ illas hauſerunt pro antidoto eſſe tradiderunt."
Dioſc. l. 2. c. 66. p. 102. " Eſt & cantharis dictus ſcarabæus parvus, fru-
" menta erodens." *Plin.* l. 18. c. 17. p. 462. " Theophraſtus quidem, hiſt.
l. 8. c. 10. in tritico naſci cantharidem ſcribit, ſed nuſquam a cantharide tri-
" ticum erodi." *Dal. in Plin.* p. 464.

SECT. II.

They are cauſtic, or rather ſeptic, diuretic and menagogue; called aphro-
ditic; and commended inwardly in the dropſy, gonorrhœa, jaundice, obſtinate
female obſtructions, &c. But more uſed, as well as more ſafe, outwardly as
a veſicatory.

" Calidæ ſunt & ſiccæ ſat validæ, adeoque corroſivæ, ſeu veſicatoriæ, diu-
" reticæ, emmenagogæ. Hinc uſus creberrimi in veſicatoriis. Internus
" earum uſus rariſſimus eſt, quippe inter venena vulgò recenſentur: veſicæ ni-
" mirum urinariæ adeo infenſæ ſunt, ut vel extrinſecus cuti alligatæ eam ex-
" ulcerent. Sunt nihilominus audaculi qui diureticis eas admiſcent. Sunt &
" improba ſcorta, quæ fœtum tenellum iis perimunt, & exturbant. N. 1. Re-
" centiores alas, pedes, & capita reſecant, ſolo corpore ſervato. N. 2. Gale-
" nus alas & pedes exhibet pro antidoto veneni proprii. N. 3. Oleum can-
" tharidum & cantarellorum elicitur per ſp. vini, prodeſtque ad calculum."
Schrod. p. 865.

1. Their acrimony and inflaming and ſeptic quality are ſufficiently evident by their effects on the ſkin. " Sunt odoris fœtidi, & ſaporis acerrimi." *Nucl. Belg.* p. 58. vide *Herman ſupra.* — 2. They affect, even outwardly applied, more the urinary paſſages, eſpecially the bladder, than any other part, except that part of the ſkin they are applied to. It is well known how commonly bliſtering plaiſters cauſe heat of urine and a ſtrangury. *Langius*, *Paſchalius*, (quoted by *Sennertus*, *pract.* l. 6. *par.* 8. c. 26.) and *Wedelius* (*Amæn. M. M.* l. 2. ſ. 2. c. 5. p. 342. although ſome years before he had not an inſtance of it, as appears by his treatiſe *De Med. Facult.* l. 1. ſ. 2. c. 6. p. 58.) Alſo obſerve, that a mictus ſanguineus ſometimes follows a bliſter made with Cantharides: of which I knew an inſtance. This may be called a ſpecific quality properly enough. But—3. (*a*) Where this acrimony is lodged has long been diſputed by phyſicians; that is, whether there was leſs danger in giving all the inſect, or in giving only the (belly, or) body, without head, feet, and wings. It was an old opinion, as appears by *Dioſcorides*, *Galen*, (*Simpl.* l. 11. fol. 82. E. & *De Antidot.* l. 2. c. 7. fol. 114. D.) *Plinius*, (l. 11. c. 35. p. 278.) *Aëtius*, (*Serm.* 13. c. 49. p. 640.) that the virus of Cantharides was in their bodies;

and

and that the head, feet, and wings, contained its antidote: although Hippocrates, and all the Arabians except Avicenna, (whom many moderns follow) ſeem to have been of another mind. For Hippocrates, in many places, orders the bodies to be taken; the head, wings, and feet being ſeparated, or thrown away; and that as well when they are taken inwardly, as when outwardly applied. "Hoc ſecundam educit, menſes deturbat, & fœtum imperfectum "extrahit. Cantharidas quinque alis, cruribus & capite avulſis .... hæc "omnia ex vino dulci diluto permixta, cum primum dolor detinuerit, potui "exhibenda." *Hippoc. De Morb. Mul.* l. 1. *Ed. Faſ.* p. 625. lin. 52. and p. 624. lin. 43. The ſame things are ordered pro ſubdititio. vide *Hippoc. Ed. Lindenii*, ii. p. 497. § 106. No. 6. and p. 500. No. 30. where he omits to tranſlate the *potio*, having turned, in the firſt-cited place, the *ſubdititium* into *bibenda dato:* but 513. § 122. the ſame preſcription is repeated, and tranſlated by him. *Hæc autem obiter.* (β) Again, ſome attribute their acrimony to their volatile ſalt, or acrid oil; others to their briſtles, or ſpinæ, with which, as ſo many ſtings of nettles, their bodies and legs are covered. "Olaus Bor-"richius obtinuit ex cantharidum ʒj, per retortam deſtillata, olei craſſi plus "ʒj; aquæ flavæ exiguiſſimam portiunculam; & ſalis vol. urinoſi ʒß. circi-"ter. Et poſtquam vidiſſet manum hominis perfrictam oleo & ſale volatile "hiſce, nil veſicularum ſentire; & microſcopii ope, in corpore cantharidum "atque pedibus, mille ſpinis inhorreſcere, harum aculeis cuticulæ impactis, "tribuit vim adurentem; quemadmodum a foliis urticæ, ut quæ ſimilibus "ſpinis armantur, manus patitur eundem aduſtionis quaſi effectum. Hinc "concludit, non in alis, nec in capite, vim cauſticam reſidere, ſed in corpore "reliquo ſolum atque pedibus. . . Interim tamen non alienum putat exiſti-"mare, vim cuſpidum, a ſale volatili eorundem increſcere, atque auctiorem "reddi." Vide *Acta Haf.* vol. iv. obſ. 80. and vol. v. obſ. 89. and *Rieger. Introd.* ii. p. 480. But (γ) Since the infuſions and tinctures partake of the ſame acrimony, or ſeptic quality of the flies, however filtered, (and calx viva, when neither ſalt nor oil can be drawn, is cauſtic) we need have no recourſe either to the prickles or chymical principles of Cantharides to account for their virtues; and it is now generally owned that all the parts of this inſect are of the ſame nature; which is eaſily deſtroyed by fire. — 4. There are related by Baglivi, and from him by Rieger, *Introd.* ii. 483. ſeveral experiments made on dogs, and human blood, with theſe flies; how accurately I know not. (α) "Tinctura Cantharidum (ex Canth. pulv. ʒij. in aquæ card. ben. ʒvj. "per tres dies digeſtis) ʒij. in dextram canis jugularem injecit Baglivius; "ſtatim vomuit, cecidit humi, aquæ circiter ℔xij. bibit, minxit, quarta die "noctu, poſt maximos ululatus expiravit. Collum ex ea parte qua experi-"mentum tentavimus, ſphacelatum omnino erat, & fœtidum. In corde ſan-"guis nigerrimus parum vel nihil coagulatus. Viſcera omnia ſana; in veſica "urinaria minima mucoſitatis portio, qua naturaliter oblinitur, inventa eſt. "(β) Canis alter eodem modo tractatus, ſtatim vomuit, cecidit ſemimortuus, "ſitiebat, ſed nihil aquæ datum, poſt ſex horas moriebatur. Aperto cada-"vere (fere ut prioris).——In ambobus caput primo inficiebatur. (γ) Can-"tharidum pulv. ʒj. ſanguinis recens extracti ʒiv. miſtus, coagulabatur ſan-"guis citius quam alia ejuſdem portia ʒiv. ſine pulvere: poſtea colore plum-"beo & ſubnigro tingebatur: & tandem ſubtilis pellicula ſubnigra in ſuperficie

" apparuit. Demum per totam ſanguinis ſuperficiem, maxima veſicularum " copia ſupercrevit, quæ ruptæ, ſubnigrum ſerum emittebant. Demum totus " ſanguis diſſolutus eſt in ſerum nigrum ac ſublividum. Alia ſanguinis por- " tio, hujuſmodi mutationibus non fuit obnoxia. (♂) Canth. pulv. ℈j. cum " fero ſanguinis febricitantis miſtus, in fundum præcipitavit, nec ullo modo " ſerum tinxit; ſolummodo evaſit liquidius, tenuius, & vix coagulabile. " Hactenus Baglivus." *Rieger. Introd.* ii. 483. — 5. Taken inwardly they provoke urine and the menſes, inflame, ulcerate, &c. and in too liberal a doſe cauſe deliriums, lipothymies, death, affecting ſtill principally the urinary paſſages, then the inteſtines, head, and heart. " Quibus exhibitæ ſunt Cantha- " rides ſigna eveniunt graviſſima: propemodum enim ab ore ad veſicam uſque " iis omnia erodi videntur, pici aut cedriæ ſimile quiddam in guſtu obſervatur: " in dextro hypochondrio inflammationem ſentiunt, & urinam ægre reddunt, " ac ſubinde cum lotio ſanguinem emittunt: ſtrigmenta, qualia dyſentericis, " per alvum egeruntur: animi defectionibus, faſtidiis, & tenebricoſa vertigine " corripiuntur: tandem vero etiam mente alienantur." *Dioſcor. Alexiph.* c. 1. p. 402. Yet we find *Hippocrates* (in his genuine works, as well as in ſome of the ſuſpected books) frequently orders them inwardly, as in a dropſy, No. iii. (*De Victu acut.* p. 406. l. 27.) in the jaundice, No. iv. (*De Intern. Affect.* p. 552. l. 25.) twice or thrice a day: ad excitandum fluxum menſtruum, No. iv. (*De Nat. Mul.* p. 565. l. 52.) &c. and always the bodies only. Though the good old man was not ignorant of their acrimony, yet it does not appear he uſed them for bliſtering. " Subdititia medicamenta acria ſanguinem " ducentia. Cantharidas quinque exceptis pedibus & capite, myrrham & thus, " commiſceto, &c." *De Morb. Mul.* l. 1. p. 620. l. 44. And he adds: " Ubi morſum ſenſerit detrahendum." p. 632. l. 4—14. where the ſtrangury is taken notice of. Whether Aretæus or Archigenes was the firſt, it is certain that both uſed Cantharides for bliſtering (vide *Le Clerc*'s *Hiſt.* p. 513.) or as a metaſyncritic remedy.

That Cantharides may be of uſe in dropſies, and ſome female diſeaſes, as they ſtimulate, as it were ſpecifically, the meatus urinarios & vicina; in gonorrhœas, as they render the urine more acrid, and detergent, and, as it were, an aqua phagedænica, to clean any ſores in its paſſages; and in the jaundice, as, on the ſame account, they attenuate; is pretty evident: but I think it a dangerous remedy, and ought to be uſed cautiouſly; and not to be ventured on in the gravel or ſtone; though ſeveral authors recommend it in theſe diſeaſes.

But outwardly, as a veſicatory, Cantharides afford a divine remedy in many deplorable diſeaſes, acute as well as chronical: and the ſtrangury they occaſion commonly ſoon yields to ſoft, ſomewhat oily, and mucilaginous liquids, taken in ſufficient quantity; as milk and water, emulſions with gum Arabic in them, decoctions of the emollients, &c. But nitre, recommended in the *New Diſp.* p. 106. being reſolvent, yea mildly eroſive, by carrying off the natural mucus, will prove a bad corrector, in my opinion. Vide *Hoffm.* and *Herm. Obſ. Ibid.* p. 105, 106. Theſe diluents alſo, after vomiting, are the beſt remedies for the ſymptoms which theſe flies taken inwardly may occaſion. That camphire inwardly uſed is of any uſe here may be doubted: but that mixed with the plaiſter it will prevent the ſtrangury, I cannot believe.

" *Dr.*

" *Dr. Groenvelt*, who publiſhed, in vindication of his own practice, a ſmall " treatiſe *De tuto Cantharidum uſu interno*, ſuffered much by a proſecution for " giving them inwardly, being charged with and ſued for mal-practice. " The iſſue ruined the unhappy doctor, and taught his envious proſecutors " the ſafety and value of his practice. They are now frequently in extem- " poraneous preſcriptions, &c." *Quincy*'s *Pharm.* p. 152. This treatiſe was publiſhed at London in 1698, in 12mo, and tranſlated into Engliſh, with additions, by John Martyn, chirurgeon, with the approbation of Dr. Greenfield (*Groenvelt*) its author, at London, in 1706, in 8vo; a not very judicious performance; and an indifferent tranſlation, or rather quack bill; though the doctor was indeed badly treated.

SECT. III.

They may be given in infuſion or tincture to gr. ij. or gr. iij; beginning with the infuſion of gr. ß. The tinctura Cantharidum contains the tincture of Cantharid. gr. vj. in every ounce; and ſo may be given to ʒiij. or iv. beginning with ʒj. They are the baſis of the unguentum epiſpaſticum, & empl. epiſpaſticum utrumque.

Theſe flies are very light, and of very unequal ſize, the biggeſt ſeldom being a grain in weight. They yield their virtue to water, wine, brandy, and rectif. ſp. vini equally: though I would prefer Rheniſh wine or brandy to rectified ſpirit, as leſs heating, and therefore a properer menſtruum. Camphor rather increaſes than abates the acrimony of the tincture.

" Tho. Bartholinus, *cent.* 5. *hiſt.* 82. ſequentem infuſionem commendat in " gonorrhœa virulenta, lotii ſuppreſſione, & calculo. ℞. Canthar. pulv. ℈j. " infunde in vini Rhenani ʒiij. vel ſp. vini ſtentque in infuſione per aliquot " dies, deinde per chartam bibulam filtrentur. Ex colato liquore cochl. 1. " (which contains near gr. vij.) ſeptem aliis cochlearibus, ſeu vini, ſeu cervi- " ſiæ admiſce. Ex hoc mixto primo die unum, altera duo cochlearia, & ſic " deinceps propinetur. *N. B.* Si pollex pedis dextri in oleo ungatur, in quo " Cantharides ſunt diſſolutæ, mirabilem facit erectionem verulamii." *Hoffm. in Schrod. Mang.* p. 643. Will they diſſolve in oil? However, this is certainly an idle whim.

" Vis cauſtica conſiſtit in ſale, infuſa enim fiunt cauſtica, ex vino, & ſpiritu " vini, ſed ſimplici tantum non rectificato, & ſ. q. Cantharidum. Hinc forte " cujuſdam error, qui ſumſit forſitan rectificatum ſpiritum vini, vel quantita- " tem Cantharidum non ſatis largam, ut ſcripſerit infuſa ipſorum non ſatis eſſe " cauſtica. Harum vim non ab imaginariis illis aculeis, ſed ab igneis ſeu ſali- " nis particulis acerrimis, dependere evincunt tum autopſia, tum experientia, " a Segero aliiſque tradita." *Herm. Cyn.* ii. p. 55.

" Abſque ſumma neceſſitate vix dantur interne; nam comperi vel quartam " grani partem aliquando renes inflammaſſe, unde diureſes copioſæ, dolori- " ficæ, imo cruentæ." *Ibid.* p. 56.

" Tinctura Cantharidum. ℞. Canthar. contuſ. ʒij. Coccinella ʒß. ſp. vi- " noſi tenuioris ℔iß. Digere & cola per chartam." *Ph. Lond.* p. 87. vid. *Pemb.* p. 270. " ℞. Canthar. ʒij. ſp. vin. rectif. ℔iß. digere per biduum, & tinct. " colatæ.

" colatæ adde balſ. cobaibæ ℥iß. Cochinel. ʒj. Digere in B. A. per quatuor " dies & cola." *Ph. Edinb.* (edit. 1756.) p. 52.

COCHINELLA.

SECT. I.

Cochinella, Coccinella, *offic.* Ficus Indicæ, grana, *B. P.* 458. Cochinella ſive Ficus Indicæ grana, *Park.* 1498. Cochinillæ, *R. H.* 1465. Scarabæolus hæmiſphericus Cochineelifer, *Gaz. Pet.* l. 1. f. 5. *Sloan. H. Jam.* ii. 208. Cochineal, *Phil. Tranſ.* N°. 176 and 193. Cochinilla and Coccinilla *offic. Dale* 359. Cochineal—is the dried body of an inſect, about the bigneſs of hempſeed, roundiſh, convex on one ſide, plain or ſomewhat concave on the other, wrinkled all over, or ridged as it were, of a blackiſh colour, but duſted with a grey farina, on the outſide, and purple within; of a warm, bitter, not unpleaſant taſte, and ſomewhat aromatic ſmell.

It comes from Spaniſh America in the galeons which bring the treaſures of Mexico and Peru to Old Spain. Whatever ſome authors may have imagined, it is now certain that Cochineal is an inſect, which lives on a ſpecies of the Opuntia, which is the

Opuntia major validiſſimis ſpinis munita, *T.* 239. O. major, folio oblongo rotundo, ſpinis longis & validiſſimis, confertim naſcentibus obſito, flore luteo, *Sloan. Cat.* 193. *Hiſt.* ii. 149. Tuna major ſpinis validis, flaveſcentibus, flore gilvo, *H. Elth.* 396. Coctus compreſſus, articulatus, ramoſus, articulis ovato-oblongis, ſpinis ſubulatis. *H. Cliff.* 183. The prickly Pear-tree *Sloano*, or Cochineal Opuntia.

This is the plant on which the Cochineal breeds and lives, as *Mr. Geoffroy* obſerves (*Mem. Acad.* 1714.) and as *Dr. Howſton* firſt told me: which *Dr. Moultrie*, who brought me the plant from America, with ſome of the inſects on it, has fully confirmed. Though they were all dead before it came to my hand, yet a great part of it was covered with a white ſilky down, in which, he ſaid, they hatch. *Mr. Miller*, however, ſeems to have underſtood Dr. Howſton otherwiſe than I did. " The Opuntia folio oblongo, media, " Tourn. is what the late Dr. Houſtown brought from La Vera Cruz with " the inſects upon it." *M. Dict.* ii. *Art. Opuntia.* So that *Plukenet*, (*Phyt.* 281.) *Dillenius* (*H. Elth.* p. 399.) and *Dale*, p. 292. were miſtaken: as were ſeveral others named by *Dale.*

" This precious inſect is almoſt of the ſhape of a large bug: its head is not " to be diſtinguiſhed from the reſt of its body, but by two ſmall eyes there, " and a very little mouth: the under part of its belly is furniſhed with ſix feet: " its back is covered with two little wings, ſo very fine and delicate that it " cannot raiſe itſelf with them into the air; and ſerve only to ſuſtain it ſome " moments, when forced out of the fruit that nouriſheth it, when to be ga- " thered. The wings, feet, and extremities of the head, are ſo delicate, that, " being eaſily conſumed by the heat of the ſun, the inſect, this winged worm, " retains no more the figure of an animal, appearing only, when dried, like " a ſeed of a moderate bigneſs, brown and almoſt black (chagrinée) ſhining,

" and

" and as it were ſilvered, or at leaſt ſlightly covered with a very fine impalpa-
" ble white duſt, all over adhering to its ſkin. . . The beſt way to make theſe
" inſects die, when they are fallen on the cloths, is to ſprinkle them with cold
" water, and then leave them to dry." *Sav. Dict.* iii. 105. " Imported from
" Cadiz of Cochenille to Marſeilles, between 20 and 30000lb. weight annu-
" ally, valued from eight to twenty-four livres per pound, an. 1688: it ſold
" at ſixteen livres per lb. in 1727, at thirty-three livres the pound, garbled."
Sav. Dict. iii. 455, and 611.

In Mangeti Bib. Pharm. vol. i. p. 600. are the accounts which De Laet, Herman, Ray, D. Rochefort, Liſter, Dale, Lewenhoek, Pomet, give of Cochineal. Lewenhoek at firſt took it for a ſeed, but afterward diſcovered his error. The name ſeems to come from coccus, quaſi coccinula; it being much ſmaller than kermes. Cochineal, No. xv. weigh but gr. iij.

SECT. II.

It is antacid, and probably diaphoretic; called cordial and alexipharmic; and commended in intermitting and malignant fevers, epilepſy, ſtone, alſo in fluxes, and to prevent abortion: it agrees in many things with kermes.

" Cardiacum inſigne habetur, ſudorificum, alexipharmacum & antefebrile
" medicamentum, febres omnes quantumvis malignas ſanans; ideoque in
" peſte, & febribus petechialibus ſæpius exhibetur." *Dale*, p. 359. " Imo
" antiepilepticum fuit inſigne *D. Stephani le Clerc, M. D. Genevenſis.* Ille præ-
" miſſis univerſalibus, Cochinillæ pul. gr. iv. ex aquis appropriatis, per tres
" ultimos lunæ dies, mane jejuno ventriculo exhibebat; hocque ſimplici me-
" dicamento plures a ſæviſſimo morbo liberabat." *Bib. Pharm.* i. 603.

1. It is bitter, but not diſagreeably ſo, and ſomewhat aromatic as we commonly get it. " Saporis ſunt acris, ſalivam ſanguineo tingentia colore." *Nucl. Belg.* p. 83. It is very much uſed in dying. — 2. The fruit of the Opuntia, on which it feeds, abounds with a deep blood-red pulp, and tinctures the urine of ſuch as eat it ſo as to make them ſometimes imagine that they piſs blood. Vide *Mr. Geoffroy. Mem. Acad.* 1714. " Fructus pulpâ ſanguineo co-
" lore manus tingente infectâ, guſtu ſubdulci, aliquot comeſti, rubro ſanguineo
" colore urinam tingunt, ut admirationi ſit." *R. H.* 1464. — 3. Cochineal, by a chemical analyſis, yields the ſame principles with other animal ſubſtances, *viz.* phlegm, of the ſame ſmell with that from C. C. ſpirit; and volatile ſalt, very near in the ſame proportion with hoglice; and a pretty thick, deep, red, fœtid oil. *Geoff.* l. c. — 4. It is more uſed for its tincture, or colour, than virtues. *Quincy, Pharm.* p. 163, ſays: " In ſome robuſt conſtitutions,
" that can diſpenſe with large doſes, it will ſometimes cure agues, after three
" or four times taking: but it is not very ſafe; for, if it does not raiſe a
" ſweat, it makes the patient hot and reſtleſs." I own I ſuſpect it as much as the kermes; though in the quantity it is given it can do little prejudice; and moſt probably as little good, as a cordial. I am not for increaſing the doſe. Vide *N. Diſp.* p. 116.

" Deprædicantur habere vim inſignem cardiacam, alexipharmacam, & anti-
" febrilem; diureſim movent, valent in calculo, gonorrhœa, & ſimilibus;
" præſcribuntur contra fluxum ventris & abortum; de cætero fere conveniunt

" cum millepedibus." *Nucl. Belg.* p. 83. I would try them in the epilepſy ſooner than in any other diſeaſe in which they are recommended, and that *Dr. Le Clerc's* way too.

SECT. III.

The doſe is from two to ſix or eight grains. *Quincy*, *Le Clerc*, gave only gr. iv. in the epilepſy. They are uſed in the ſpiritus lavendulæ compoſitus, tinctura Cantharidum, tinct. hellebori nigri, tinct. ipecacuanhæ, tinct. rhabarbari, tinct. rhei amara, tinct. ſacra, tinct. ſerpentariæ compoſ. tinct. ſudorifica, (nimis larga doſi), vinum chalybeatum, decoctum nitroſum, decoct. ſerpentariæ compoſitum, pulv. contrayervæ comp. confectio alkermes, (quæ ingreditur elect. cardiac.) ſo perhaps too much. " I have no reaſon to believe theſe " inſects to be poſſeſſed of any conſiderable medicinal virtues." *James's Ph.* p. 503. " Cochineal has been ſtrongly recommended as a ſudorific, cardiac, " and alexipharmic; but practitioners have never obſerved any conſiderable " effects from it." *N. Diſp.* p. 116.

HIRUDO.

SECT. I.

Hirudo, Sanguiſuga, *offic.* Hirudo alia parvis tuberculis nonnihil aſpera, medicinalis, *R. Hiſt. Inſect.* p. 3. The Leech, or Loch-leech, which is uſed in Britain, differs from the Hirudo, (*maximè apud nos vulgaris*). The Horſe-leech, or Blood-ſucker, *R. Hiſt. Inſ.* p. 3. ſeems to be moſt eſteemed in foreign countries; and is the Hirudo, Sanguiſuga offic. *Dale*, p. 353. Following Schroder here we ſhun the Horſe-leech. See the difference in *Ray's Hiſt. Inſectorum.*

" Hirudo alia, parvis tuberculis nonnihil aſpera medicinalis. Medium " dorſum ex viride nigrum eſt; dein linea utrinque rubeſcens; inferius duæ " aliæ latiores lineæ, ſed nigris majoribus maculis intermixtis: venter magis " nigricat, maculis virideſcentibus. Hæc eſt qua medici utuntur, ad ſangui- " nem exſugendum. In fundo oris tres magnæ, acutæ, latæ, & albæ carun- " culæ dentium inſtar, ſed molles, naſcuntur. Mirum quomodo cutem per- " forent, cum nihil durum aut oſſeum appareat. Caruncula dentiformes in " hac multo majores ſunt, quam in priore. Vulnus quod infligunt trique- " trum eſt, dentibus in unum concurrentibus." *R. H. Inſect.* p. 3.

They live in running as well as ſtanding waters; are kept in bottles, not quite full nor cloſe ſtopt, in water, which is to be changed every two or three days; and ſoft rather than hard water; with which ſome mix a little ſugar. Hirudo, Græcè βδέλλα à βδάλλω, ſugo, mutata α in ε.

SECT. II.

They are uſed only alive to draw blood, in order to diminiſh its quantity, or ſome way alter its courſe. " *Uſus*

" *Usus.* Sanguinis exsuctioni inserviunt, adeoque cum cucurbitulis conve-
" niunt. *N.* antequam applicentur, servanda sunt in aqua pura, ut probe
" purgentur; hinc loco applicationis sale nitri fricato, sanguineque vel argilla
" inuncto applicanda. Cum amoveri vis, insperge parum salis, aut cineris,
" aut lini combusti." *Schrod.* 867. The very learned *Heister*, in his *Institut. Chirurg.* has a chapter *De Sanguisugis*, (where however there is but a bad figure of one). I shall therefore only take notice of a few things concerning them, which are not so fully handled there as to me appears necessary.

Leeches cause pain, making gradually a pretty large three-cornered wound, perforating arteries as well as veins, if within their reach; whence sometimes mortal hæmorrhages have ensued: sometimes they will not fix on the designed part; at other times they suck till they burst, and will not come off even then; &c. Wherefore a safe place being pitched on, 1. to make them fix, the part must be rubbed till it be warm enough, or a little red; if that do not, anoint it with a little sweet cream, or fresh blood (of a pigeon or hen, *Heister.*) taken from ones finger. 2. To make them fall off, throw common salt on them, which never fails. 3. Hence if a leech by accident be swallowed; or, applied to the hæmorrhoid veins, get into the rectum, which is said sometimes to have happened; warm salted water drunk, or injected, will procure their expulsion. Vide *Dioscor. Alexiph.* c. 32. p. 413. And 4. To stop the hæmorrhage, if the common methods succeed not, as sometimes happens from the deepness of the wound, a proper actual cautery will seldom fail: if it does, the vessel must be stitched. " Crediderim Hirudines contusas & podagricis applicatas
" esse narcotici loco. Eadem ratione & cochleæ domiportæ & limaces pro-
" desse possunt. Narcotica enim sunt omnia illa animalia." *Hoffm.* p. 515.

LIMACES.

SECT. I.

Limaces terrestres, cochleæ terrestres, *offic.* " (Cochlea cinerea maxima
" edulis; cujus os operculo crasso, velut gypseo, per hyemem clauditur." *List. Animal. Angl.* iii. " Cochlea terrestris, Limax terrestris. *offic.* The Snail, *Dale* 362. " In meridionali Angliæ parte frequens. . . Verum quoniam hoc
" genus Cochleæ minus frequens, nec ubique obvium est, officinæ nostræ
" ejus loco Cochlea vulgari utuntur." *Dale Ib.*) Cochlea vulgaris, major, pulla, maculata & faciata, hortensis. *List. H. Anim. Angliæ*, p. 113—116. The common Garden Shell-Snails.

These are common enough in our gardens. All Snails, as well as Leeches, are hermaphrodites, yet copulate, (vid. *Lister*, l. c.) and seem to be panphaga. I have seen them eat the leaves of artichoaks, wild cucumber, henbane, tobacco, &c. " Olera depascunt, & omnigenam herbam." *Lister.* l. c.

SECT. II.

They are antacrid and nourishing; called pectoral; and commended internally for weak children, coughs, consumptions, &c. and externally for pains, tumors, ulcers, &c.

" *Officin. nat.* Cochleæ integræ, teſtæ, pinguedo, mucus. 1. Cochleæ re-
" frigerant, incraſſant, conſolidant, leniunt, nervis conveniunt, ac pulmoni-
" bus. Hinc *uſus præcipui* interne, ad tuſſim, phthiſin, ſcreationem ſanguino-
" lentam, alioſque pulmonum affectus; hinc ad epatis calorem, & colicum
" dolorem. Externe maturant ac rumpunt anthraces, conſolidant vulnera,
" præcipue nervorum, ulcera ſanant, inflammationes (podagricas) mitigant,
" ventrem hydropicorum, hydroceleque detumeſcere faciunt, hæmorrhagiam
" cohibent (fronti applicatæ). Spuma e Cochleis ſine aqua igni appoſitis fiſtu-
" las domare dicitur. 2. Teſtæ tritæ exhibentur calculoſis, rimas manuum
" ſiccant & conſolidant. 3. Pinguedo (in elixato brodio, ubi id refrixerit,
" ſupernatans) oculorum rubedini doloribuſque medetur, defluxiones ad ocu-
" los intercipit (fronti cum albo ovi impoſita). 4. Mucus ſalivoſus (quem
" compunctæ Cochleæ reddunt) emplaſticus eſt, ideoque glutinans, defluxio-
" neſque ad oculos intercipiens, (in anacollematis). *Præp.* 1. Aqua ſtillat.
2. Cinis. 3. Liquor Limacum." *Schrod.* 807.

They are not acrid, but abound with a viſcous juice: they feed on vegetables only. " Succum continent lentum, unde difficilis ſunt digeſtionis." *Nucl. Belg.* p. 177. " Cochlea terreſtris ſtomacho utilis eſt, & ægre corrum-
" pitur." &c. *Dioſcor.* l. 2. c. 11. p. 91. Snail-milk is often given to weak and tender children. Black Snails, without ſhells, are commended (by our highlanders) for fixed pains and ſwellings of the joints, beat into a cataplaſm. The ſhells are abſorbent.

LUMBRICI.

SECT. I.

Lumbrici terreſtres, Vermes terreſtres, *offic.* Lumbricus terreſtris, *Aldrov. Inſect.* 693. *Ionſ. Inſect.* 137. *Charlet. Inſ.* 59. *R. Hiſt. Inſ.* p. 1. Vermes terreſtres majores. *Mer. pin.* 206. Earth-worms.

They much reſemble the Lumbrici teretes inteſtinorum, yet are evidently ſpecifically different, as appears by their anatomy, (vide *Willis de Anima Brutorum*, c. 3.) compared with that of the teretes inteſtinorum, (vide etiam *Clerici Hiſtoria Lumbricorum*, p. 218). This crawling contemned inſect has neither eyes, ears, feet, bones, nor brains; yet ſeems able to diſtinguiſh between day and night, dry and moiſt weather, and to eat its way through very hard earth, and even know whatever is neceſſary for the preſervation and propagation of the ſpecies. They feed on the juices of the earth only.

To preſerve them, the largeſt and fatteſt ought to be ſlit up, well waſhed, and then dried.

SECT. II.

They are nouriſhing and antacid; called diuretic, deobſtruent, and anodyne; and commended inwardly in the jaundice, dropſy, colic, ſpaſms, convulſions, apoplexy, palſy, ſcurvy, rheumatiſm, gout, gravel, worms, &c. and outwardly as diſcutient and anodyne. Rari ſunt uſus: forſan nullius.

" Lumbrici

" Lumbrici terreni ſunt inſigniter diuretici, diaphoretici, anodyni; diſcu-
" tiunt, emolliunt, obſtructiones reſerant, lac augent, vulnera nervoſque præ-
" ciſos glutinant. *Uſus præcipui* ſunt in apoplexia, ſpaſmo (ex ſignatura) aliiſ-
" que affectibus nervorum, ac muſculorum; in ictero (utroque) hydrope, ver-
" miculatione infantum, dolore colico. Imprimis autem ſpecifice proſunt in
" arthritide illa ſcorbutica quam vagam appellant. Intus exhibentur vel toti
" conquaſſati, recenterque v. g. cum vino trajecti per linteum; vel ſiccati &
" pulveriſati. Extus applicantur vivi & mortui: vivi impoſiti, donec morian-
" tur, proſunt panaritio; mortui in cataplaſmatis fere adhibentur. Odontal-
" giæ convenire dicitur cinis (cavitati dentium inditus): podagricos dolores
" leniunt (pulvis cum farina calide impoſitus). *Præp.* 1. Aqua. 2. Oleum
" coctum. 3. Liquor. 4. Pulvis." *Schrod.* p. 868.

They are no ways acrid, feed on the earth, are eaten by many animals, and yield the ſame principles with other animal ſubſtances: they contain alſo a viſcid juice, with which they are commonly beſmeared; ſo agree much with ſnails. " In vitro putrefacti, & per ſe deſtillati, ſuggerunt ſpiritum urinoſum,
" ſal volatile, & oleum fœtidum." *Albin. MS.* Without putrefaction it requires a much greater heat than that of boiling water to raiſe a volatile ſalt from them: ſo the aqua Lumbricorum is nothing but water, more putreſcent than common water.

" The aqua Lumbricorum magiſtralis is a very good medicine in inflam-
" mations and tubercles of the lungs. . . They are ſeldom omitted in the oc-
" caſional preſcriptions of ſnail-waters, and make a very good ingredient therein, having much more in them that will riſe in the ſtill than ſnails, as we
" ſhall ſee in the following parts." *Quincy's Pharm.* p. 140. " For moſt that
" can be ſuppoſed to riſe from ſuch ingredients (aq. limacum) is a nitrous ſalt,
" wrapt up in ſoft mucilaginous parts." *Ib.* p. 344. *Rare chymiſtry!* Aqua Lumbricorum was omitted in the *Pharm. Lond. Edit.* 1721. but aqua Limacum utraque retained. In the *Edit.* 1746. theſe were thrown out alſo, and the former with it. What better is oleum Lumbricorum than an axunge, or oil? or axunge and oil mixed? Is it ever uſed? You may eat them by ounces, *ſi placet.*

" Terreni vermes (γης ἔντερα) triti & impoſiti, præciſos nervos glutinant,
" ac tertianas quoque ſolvunt. Decocti vero cum anſerino adipe, & inſtillati,
" affectis auribus medentur. In oleo autem decocti, ſi oppoſitæ auriculæ in-
" fundantur, dentium doloribus præſtant auxilium. Triti quoque & cum
" paſſo epoti urinas ciunt." *Dioſcor.* l. 2. c. 72.

SCINCUS.

SECT. I.

Scincus, Scincus marinus, *offic.* Scincus, *Aldrov. Quad. Ovip.* 658. *Ionſ. Quad.* 138. *Bellen. de Aquat.* 47. Scincus, ſeu Crocodilus terreſtris, *Worm. Muſ.* 315. *R. Synop. Quad.* 271. Scincus quem & Crocodilum terreſtrem vocant, *Geſn. Quad. Ovip.* 24. The Scink.—This is a little four-footed animal, about the bigneſs of a ſmall lizard, covered with whitiſh ſhining ſcales,

with a round tail, long and ſharp ſnout, and five long toes in each foot; found about the Red-ſea, on the Nile, &c. being an amphibious animal.

" In the Antilles iſlands, where there are many of them, they are called " *Brochet de mer*. . . All that come from Egypt want the intrails and end of the " tail." *Sav. Dict.* ii. 1630. where it is called Stinc marin.

" Scincus (σκιγκος) quidam in Ægypto, alius in India, alius ad Mare Ru- " brum gignitur. Eſt & alius qui apud Libyam, Mauritaniæ fluvium, repe- " ritur. Eſt vero Crocodilus terreſtris ſui generis, qui, addito naſturtio, ſale " conditur. Aiunt porro partem eam quæ renes amplectitur, ʒj. pondere in " vino potam, venerem accendendi vim habere: attamen lentis decocto cum " melle, aut ſemine lactucæ cum aqua poto, intenſam illam Veneris cupidita- " tem inhiberi. In antidota quoque additur. *Dioſcor.* l. 2. c. 71.

SECT. II.

It is probably nouriſhing, and of eaſy digeſtion; called aphroditic and alexipharmic; and is uſed in the mithridatium, on account of which only it is found in our ſhops.

" *Officin. nat.* 1. Integri exiccati. 2. (raro) pinguedo. Alexipharmacus " eſt Scincus, Venerem accendit. Pinguedo ſimili virtute pollet. Doſis ʒj. " Matthiolus commendat roſtrum & pedes, eoſque cum vino propinat; hinc " & carnes laterum commendat. Ingreditur antidota, & præcipuè theriacam " Andr. & Antidot. Matthioli." *Schrod.* p. 871.

It is ſaid to feed on aromatic plants: and its dung is ſaid to be aromatic: but as we have it, it is not ſo. And there being only ventris Scinci ʒiiß. in about mithridati ℔x. it could ſuffer nothing though Scincus were omitted.

" Præferunt quidem tabulæ noſtræ, integrum animal: ſed Mithrid. Damocr. " 2. Antid. 2. vult ventrem 7. Dioſcorides carnes circa renes; Galen 11. " Simpl. renes ipſos commendat Veneri ciendæ; at Plinius, l. 28. c. 8. roſ- " trum & pedes: videor mihi inde colligere, διαφωνιαν eſſe falſitatis notam. " Ergo parum abeſt quo minus cum imperio faceſſere jubeam Scincum ex " omnibus officinis; & alioquin venereum illud medico Chriſtiano indignum " eſt." *Hoffman*, p. 517. " Ego vires iis adſcribere multas nequeo." *Albin. MS.*

SCORPIONES.

SECT. I.

Scorpio, Scorpio terreſtris, *offic.* Scorpius, *Aldrov. Inſect.* 577. *R. Hiſt. Inſ.* p. 9. Scorpio, *Ionſ. Inſ.* 95. *Worm. Muſ.* 264. *Charlet. Inſ.* 54. Scorpio, *offic. Dale* 354. The Scorpion—is an eight-footed land inſect, with an oval body, jointed tail, armed with a ſting, and of a ſooty dark colour (though ſome are of a yellowiſh white), found in every warm and hot country.

They are very common in the ſouth of France, the Canaries, Italy, Aſia, Africa, America. In Germany and Swiſſerland there are alſo ſome Scorpions, but they are not reckoned hurtful. There is a very curious Memoir on

Scorpions, containing ſeveral experiments, by *Mr. Maupertuis*, *Mem. Acad.* 1731. p. 317—326. wherein ſeveral vulgar errors are corrected. He ſays,

" Thre are two ſorts of Scorpions about Montpelier; one ſmall, and of the " colour of burnt coffee, common in houſes; the other lives in the fields, " and is of a yellowiſh white colour, about two inches long. They are ſo " plentiful about a village called Souvignargues, five leagues from Montpe- " lier, that the peaſants drive a ſort of trade in them with the apothecaries " of the neighbouring villages."

(α) " I made an irritated Scorpion ſting a dog, in three or four places (ſays " *Mr. M.*) in that part of his belly which is freeſt of hair, and an hour after " he ſwelled much, and ſtaggered, and rendered all he had in his ſtomach " and guts, continuing for three hours to vomit, from time to time, a ſort " of viſcid (bave) ſlaver. The tenſion of his belly diminiſhed after every fit " of vomiting, but immediately ſwelled again, and ſo alternately for the three " hours: but then convulſions ſeized him; he bit the earth, dragged him- " ſelf along on his fore feet, and in fine died five hours after he was ſtung. " I never obſerved any ſwellings on the part ſtung by Scorpions. Some days " after I repeated the experiment, and cauſed ſeven or eight dogs to be ſtung " by enraged Scorpions, brought freſh from Souvignargues, again and again, " ſo that ſome had ten or twelve wounds on the ſame part; yet none of the " dogs died, ſwelled, or ſuffered any thing but the pain of the ſtinging. " I made Scorpions alſo ſting three chickens under the wing, and on the " breaſt; but none of them gave the leaſt ſign of ſickneſs; though I made " uſe of both male and female Scorpions, and newly taken. Hence (ſays " he) it is not eaſy to determine how many circumſtances muſt concur to " render the ſting of a Scorpion mortal. And this, perhaps, gave credit to " ſome counter-poiſons uſed in Languedoc, as the oil, in which Scorpions " have been drowned, applied to the part, the Scorpion itſelf bruiſed on it, " &c." Thus *M. Maupertuis.*

(β) It is affirmed, that once a mouſe, being ſhut up in a bottle with a Scorpion, was ſtung by it, and ſoon died; but another mouſe being put into the bottle, and alſo wounded, ſhe had the courage to devour the Scorpion, and the good fortune to be avenged of her enemy and cured of her wounds at the ſame time. This fact is looked on as certain; and the mouſe as inſpired by nature with the knowledge of this remedy. Mr. Maupertuis put a mouſe and three Scorpions into a bottle: the mouſe ſoon received ſeveral punctures, which made her cry out at firſt; but then, reſolving to defend herſelf, with her teeth ſhe killed all the three Scorpions, but did eat none of them, neither did the ſtings give her further trouble.

(γ) " It is very remarkable, concerning this inſect, what an ingenious " gentleman, who lived ſeveral years in Barbary, told me he had ſeveral times " tried, that if it be ſurrounded with a circle of burning coals, it does, upon " the ſenſe of the heat, turn itſelf violently every way to make its eſcape; " but finding it impoſſible, and the pain from the fire increaſing, it ſtrikes " itſelf twice or thrice with the ſting on the back, and immediately dies " of the wounds. Others may make what reflections they pleaſe on this " ſelf-murder; it is to me, beyond all diſpute, ſufficient to decide the contro- " verſy between writers, whether poiſonous animals, of the ſame ſpecies, can

" kill

" kill each other." *Mead of poiſons*, p. 55. edit. 1702. I never ſaw a Scorpion alive; but by the ſtructure of the tail, and form and ſituation of the ſting, it ſeems to me not to be poſſible for the Scorpion to ſting itſelf on the back. Neither does it appear probable, that upon its ſtinging itſelf it ſhould immediately die. N. B. In the edition, 1745, of *Dr. Mead on poiſons*, we have, " The fact has ſince been confirmed to me by others, who have aſſured me " that it is a common diverſion among the ſoldiers at Gibraltar (where theſe " creatures abound) to make this experiment. This ſelf-murder decides the " controverſy among writers, &c." p. 95. " Others may, &c." being left out; which ought never to have been inſerted. But let us hear *Mr. Maupertuis.*

" It is alſo reported, ſays he, in Languedoc, that if a Scorpion be incloſed " within a circle of burning coals, it will ſting and kill itſelf. I made an " incloſure of coals, and put a Scorpion in it; which, feeling the heat, " ſearched round for an outgate, and finding none, it traverſed the coals, " which half burnt it. I put it again into the incloſure, and, having no more " ſtrength to endeavour to force a paſſage, it ſoon died; but without ſhewing " the leaſt deſire to make an attempt on its own life. The ſame experiment " was repeated on ſeveral other Scorpions, which all acted the ſame way. " The Scorpion's poſture of defence gave occaſion to this ſtory, but thus " ſting itſelf it cannot."

The ſame learned gentleman has many other curious things concerning the ſting, its perforations, and the bottle whence it iſſues; the fruitfulneſs, courage, cruelty to one another, want of natural affection to their young ones, their enmity to ſpiders, or rather their being their moſt delicious food, &c. They feed on flies, hoglice, ſpiders; yea on one another.

" Terreſtris σκορπιος crudus, tritus & impoſitus, ſuæ plagæ remedium eſt: " eſtur quoque toſtus in eundem uſum." *Dioſcor.* l. 2. c. 13. totum, p. 92. He gives the ſymptoms following the ſting, *Ther.* c. 6. p. 427. which do not well agree with Mr. Maupertuis's obſervations. " Quidam & ab ipſis fœtum " devorari arbitrantur: unum modo relinqui ſolertiſſimum, & qui ſe ipſius " matris clunibus imponendo, tutus & a cauda, & a morſu loco fiat. Hunc " eſſe reliquorum ultorem, qui poſtremo genitores ſupremus conficiat." *Plin.* l. 11. c. 25. p. 274. " Pelli interficique a prole tradit Ariſtoteles." *Dalecamp.* in *Plinii*, l. c.

SECT. II.

They are called diuretic, and a remedy for the wounds they give: but are of no uſe here. The oleum Scorpionum was thrown out of the *Lond. Diſp. edit.* 1721. as were the inſects themſelves, *edit.* 1746. We retain the name, but few keep the ſubſtance. " Doſe a ℈ß. ad ʒß." *Lem. Dict.* 496.

" Urinam cient, calculo renum aut veſicæ impeditam (vivi incinerati & " exhibiti). Ictibus propriis ſubveniunt, (triti & impoſiti). *Præp.* 1. Oleum " Scorp. ſimplex. 2. Oleum Scorp. compoſ. Meſuæ. 3. Oleum Scorp. mag- " num Matthioli. 4. Oleum Scorp. ſanguineum." *Schrod.* p. 871.

Scorpions feeding on inſects, their juices may perhaps be acrid and diuretic: but whether they are ſo I cannot tell. That their ſting prove mortal, the ſting muſt

muſt go further in than the perforations, which are at ſome diſtance from the point, and convey the virus into ſome of the veins, which perhaps the blood, flowing out, often carries away with it; which accounts for the ſting's proving ſo ſeldom mortal. By ſome experiments made with common oil on the bite of a viper at London, one would think that the virtues of the oil of ſcorpions might be owing to the oil only, if it has any. But a great variety of ſuch experiments made at Paris ſince ſeem to prove that oil-olive is no cure for ſuch bites; neither, mixed with the virus of vipers, does it enervate its virulency.——See a Narration of Experiments made 1 *Junii* 1734, before ſeveral *Members of the Royal Society*, on one *William Oliver*, a viper-catcher, who ſuffered himſelf to be bit by a viper, or common adder; and on other animals likewiſe bitten by the ſame and other vipers, drawn up by *Crom. Mortimer*, *M. D.* their ſecretary, with ſome remarks on the cure of the bite of a mad dog; *Phil. Tranſ.* vol. 39. No. 443. for *October* 1736: wherein it is obſerved that common ſallad oil was found an effectual cure of the bites of vipers, even after the parts were ſwelled, and other direful ſymptoms had already followed. See alſo a *Memoir*, wherein is examined whether oil-olive is a ſpecific for the bite of a viper, by *Meſſ. Geoffroy* and *Hunauld*, *Mem. Acad.* 1737. p. 255—285. Now ſince we have no reaſon to doubt of the facts related in either of theſe papers, the difference muſt, in my opinion, be owing to the vipers in England not being ſo virulent as they are in France.—Oil ſeems to contribute no more to the cure than as it relaxes the parts, and ſo aſſuages in ſome meaſure the pain.

" Obſtupeſco ad Galeni verba, quando, Simpl. Med. l. 10. (fol. 75. G.) " ubi dixit ſputo hominis jejuni Scorpiones occidi, ſubjungit, propriis oculis " ſe vidiſſe, & hanc experientiam pluribus vicibus ſibi comprobatam. Si ho- " mines & ſcorpiones, qui illa ætate Romæ & Pergami naſcebantur, ſimiles " erant iis nunc in Hetruria naſcentibus, licitum mihi ſit dicere, bona cum " venia Galeni, non poſſem me credere, hoc niti experientia; namque pluri- " bus vicibus curavi per ſex dies continuos ſputari a jejunis hominibus & ſiti- " bundis in Scorpiones, & Scorpiones non ſunt mortui. Moriuntur equidem " certe, ſpatio quadrantis horæ, ſi ſingulis illorum ſupra dorſum, tres aut " quatuor guttæ, olei olivarum infundantur. Unde multo magis ſtupori " mihi eſt Albertus magnus, qui libro de animalibus recenſet, quod immer- " ſerit aliquando in lagenam olei Scorpionem, qui ibi vixerit ultra 21 diem ſe " movendo, & in gyrum in fundo hujus olei volvendo. In ſimili vaſe, fere " pleno, ipſe incluſi viperam, &c." *Franc. Redi Obſ. de Viperis*, p. 235. Vide *Nucl. Belg.* p. 266.

VIPERA.

SECT. I.

Vipera, *offic.* Vipera, *Aldrov. Hiſt. Serp.* 115. *Merret pin.* 208. *Geſn. de Serp.* 125. *Bellon. Cluſ. Exot.* 123. *Charlet. Exer.* 32. *R. Syn. Quad.* 285. *Ionſt. de Serp.* 7. *Worm. M.* 262. Vipera, *offic. Dale* 395. The Viper, or Adder. —This is a viviparous ſomewhat ſcaly and variegated ſerpent, about two feet long ſometimes, endued with a ſort of weapon, tuſk or fang on each ſide

of its upper jaw, which conveys its poiſon in biting: if taken by the tail they cannot lift up the head ſo as to bite the hand.

They are pretty common in our moors, thickets, ſtony places, &c. being natives of cold as well as of hot climates, though leſs noxious in the former. The ſymptoms following the bite of a viper, eſpecially in hot countries and ſeaſons, are very terrible, if once the blood be infected with their poiſon. "Vipers eat rats, frogs, worms and ſeveral other inſects, when at liberty; "but, being confined, they will live more than a year (*Redi* ſays ten months "only) without eating any thing." *Lemery's Dict.* 572. "Wormius herbis "veſci ait, at certe non ſolis; nos enim e diſſecti ventriculo tres mures adultos "eximimus, quos, quod mirum, integros deglutiverat, cum collum vix "minimum digitum ambitu æquaret." *R. Syn. Quad.* 286.

Fran. Redi Obſervationes de Viperis (which you have in his *Opuſculorum Tom. alter*, *Amſtel.* 1685, in 12mo, p. 155—248.) are very curious, both entertaining and inſtructive. It is incredible what a number of vulgar errors, adopted by many famous authors, both ancient and modern, he has confuted by experiments. For inſtance (α) That Viper's gall is poiſon. "Decretum fuit "a felle faciendum experimentorum initium, & tanto magis, quia vir doctus, "quidem & in lectione autorum tam antiquorum quam recentiorum multum "verſatus, omnia ſua oppigneraſſet, niſi quædam minima guttula fellis vipe-"rini epota, hominem ex robuſtiſſimis, & quamcunque beſtiam ex ferociſſi-"mis necaret; addens rem amplius in dubium non revocari; eam Galenum "medicos docuiſſe; eam Plinium diſerte dixiſſe; Avicennam credidiſſe parum "medicamenta juvaſſe illos, qui fel viperæ biberant; Rhaſin exiſtimaſſe, nul-"lum valuiſſe ingenium, nec medicum præſidium, ſed Dei fuiſſe neceſſarium "auxilium; Hali Abbas affirmaſſe fere nullum opponi remedium poſſe, in-"fernali huic veneno; idem etiam Albucaſi viſum. His additi Gulielmus de "Placentiis, ſanctus Arduinus, cardinalis de S. Pancratio, Bertruccius Bono-"nienſis, B. A. Abbatius, Cardanus, J. C. Claudinus, & tot tantique alii, "quorum celeberrima fama. . . . Interea audiendi gratia ſtabat in angulo quo-"dam Jacobus Sozzi viperarum captor, qui ſubridendo prehendit fel viperæ, "miſtumque dimidio cyatho frigidæ, illud hauſit vultu intrepido, ac conſpi-"ciendum dedit, quam fuerint deluſi ſupradicti autores, ſeque obtulit ad ebi-"bendum omnem eam quantitatem fellis quam maximam poſcerent." Vide *Redi's Obſ.* p. 161. It (Fel. Vip. ℥ß.) was afterwards given to ſeveral animals, and among the reſt to a dog; and to a cat all the entrails of four vipers, which licked her lips ſweetly after them, and all without the leaſt harm.

(β) That the liquor conveyed through the dentes canini is poiſon taken by the mouth. "In fundo duarum illarum vaginarum, intra quas repoſitos "viperæ habent dentes humor quidam ſtagnat, colore & ſapore ſimillimus "olei amygdalorum dulcium; qui quando vipera evaginat dentes, & morſum "minatur, neceſſario effunditur in vulnus, quia vaginæ ſe contrahunt. Quæ-"ſitum eſt, an liquor iſte ore aſſumptus queat necare? & a quibuſdam con-"ſtanter affirmatum eſt, ſed ab aliis negatum; & idem Jacobus viperarius "obtulit ſe ad ebibendum ejus cochleare plenum, & dictum factum, viſus eſt "illud delicatiſſime & per vices deguſtare ſive elambere. Viperam ex maxi-"mis & ferociſſimis, & irritatiſſimis prehendit, & curavit ut in dimidium "vini cyathum, non ſolum omnis liquor vaginularum profluerit, ſed inſuper

" omnis ſpuma, omniſque ſaliva, quam exagitata, percuſſa, compreſſa, irata " rejicere potuit, & ſic bibit hoc vinum ac ſi eſſet liquor gratiſſimus, & ſe- " quenti die, cum tribus viperis contortis inter ſe, denuo eundem luſum ex- " hibuit, ſine ullo metu. Ob id ego quatuor capita viperæ ſemiviva, ſangui- " nem ſtillantia, & ſqualida, immerſi in ſcyphum aquæ plenum, & reſecui " omne pulpamentum palati & maxillarum, & curavi ut omnis humiditas " quæ ibi continebatur inde ſcaturiret, donec aqua redderetur ſpumoſa, tur- " bida & ingrata, poſtea fere totam infudi in ſtomachum hædi & reſiduum " quod ſupererat, anati fiebat juſculum commodum; ſed ne hæc, nec ille ul- " lum veneni accepti ſignum dederunt. Abſque ergo temeritate deluſi dicen- " tur Albertus Magnus, eruditiſſimus Mercurialis, ſubtiliſſimus Capivaccius, " & celeberrimus Zacutus, quando dicunt vinum in quo ſuffocata ſit vipera, " eſſe ſemper peſſimum venenum lethale; & etiam Aëtius, & Dioſcorides, " qui idem dixerunt, non ſolum de vino illo in quo mortuæ ſunt Viperæ, " ſed de eo etiam in quod caput, bibendi cauſa, immerſerint. Sed non vidi " Viperas adeo cupidas vini uti Ariſtoteles & Dioſcorides ipſas faciunt." He ſhews that Vipers will not drink wine; that the ſtory in Galen (Simpl. l. xi. p. 77. H) of a Viper being ſuffocated in a bottle of wine is incredible; that bottles of wine, wherein Vipers are ſuffocated, though cloſe ſtopped, will not burſt; which is brought by Severinus (from *Paulus Æmilius Verallus*) as an argument to prove that Vipers are calidi temperamenti, as if they burſted ob nimium calorem carnium Viperinarum; that the liquor flavus intra vaginas dentes contegentes, inſtilled into a wound, kills in three or four hours time; that this poiſon is not derived from the gall-bladder, &c. *Vide* p. 165—197.

(γ) That the female Viper has more dentes canini than the male. " Quot " dentium illorum Vipera habeat ex libris diſcere nequeo. Nicander ſcripſit " maſculum habere duos dentes, & fœminam plures: aſſentitur ejus ſcholiaſtes, " Autor l. de Ther. ad Piſonem, Rhaſis, Avicenna, Actuarius, Gorræus. " Aëtius determinavit numerum binarium in maſculis, quaternarium in femel- " lis: eandem ſententiam foverunt Iſaacus, Fran. Caballus, Zacutus, Mercu- " rialis, Amatus Luſitanus, Fran. Sanches, Caſp. Hoffmannus, & alii mino- " ris famæ, Paulus, Ægineta, Haly Abbas, tam maſculo quam femellæ, " tantum binos adſcribunt. Vincentius Belluacenſis numerat tres; Baldus " Angelus Abbatius & Veſlingius quatuor: Alb. Magnus affirmat marem " habere duos in ſuperiore maxilla, & duos in inferiore, ſibi invicem oppoſi- " tos. M. A. Severinus aſſerit, in unaquaque maxillarum ſuperiorum ſe vi- " diſſe ad minimum tres, quatuor, atque etiam quinque, fortaſſe quoque ſex. " Cuinam jam credere debemus? Dicam tibi quod vidi pluſquam in trecentis " Viperis. Viperæ utriuſque ſexus, habent tantummodo duos dentes caninos " quibus mordent, firmos & ſolidos, emicantes ex oſſe maxillæ ſuperioris, " ſingulos pro latere, & operiuntur vaginis, modo non diſſimilli illi quo ipſe- " met vidi leones & feles abdere ac contrahere ſuos ungues. . . Dicti dentes " interius ſunt cavi & perforati, uſque ad extremum apicem. . . Proinde non " credo verum eſſe, quia interius cavi ſunt, illos dentes eſſe receptaculum ve- " neni, nec id per arctiſſimum foramen inciſionum in vulneribus, quas mor- " dendo Vipera facit, currere; quoniam apprehenſa Vipera & ore ipſius vi " divulſo, etiam ſi contegantur dentes, incipit flavus ille & peſtilens liquor " ſupra dentem diſcurrere, non intra cavitatem, ſed evidenter forinſecus a ra-

" dicibus ad acumen: atque hoc ſæpius pleniſſime oculis deprehendi." Then he proves that the teeth are not of themſelves poiſonous; as *Baldus Ang. Abbatius* and *Schroderus* aſſert: that muſic is no cure for the bite of a Viper; as ſome *Pythagorean* philoſophers, *Theophraſtus* (as quoted by *Aulus Gellius in Noct. Att.*) *Severinus*, and *Zacutus*, would have it: that there is neither ſting nor poiſon in the tail of a Viper; though many ancients (among them *Andromachus*) as well as moderns affirm the contrary, &c. *Vide* p. 197—209.

(*d*) That the ſaliva hominis is noxious to (yea kills) ſerpents. " Poſtquam " legeram in Hiſt. Anim. Ariſtotelis, ut plurimum beſtiis venenatis noxiam " eſſe ſalivam humanam, deſiderium me inceſſit experiendi an hoc eſſet verum, " & præſertim in Viperis, eoque magis quod & Nicander idem affirmaret, " & plurimis non modo Galeni locis, ſed & à Plinio, Paulo, Serapione, Avi- " cenna, & Lucretio probaretur. Et iſtis antiquis philoſophis ſubſidio ventum " a plurimis recentioribus, & potiſſimum a cardinale Ponzetto, a Bertruccio " Bononienſi, a Geſnero, a Th. Campenella, a Marcio Antonio Alamo, a " Zacuto, a Lælio Biſciola, & a doct. Ul. Aldrovando, qui non ſolum cer- " tiſſimum eſſe perſuaſum habet hominis ſalivâ interfici ſerpentes; ſed & ratio- " nes dare conatur, reducendo id tandem ad vanum & chimericum nomen " tam decantatæ antipathiæ. Sed P. J. Faber & M. Aur. Severinus, miſſa " antipathia, adducunt pro cauſa ſal ammoniacum, quo pleniſſimam eſſe ſta- " tuunt ſalivam humanam. Incluſi itaque ſex Viperas electas grandiori pyxidi, " quibus per 15 dies, horis matutinis, ordine atque ſigillatim omnibus feci " aperire gulam, & curavi ut aliqui homines jejuni illam implerent ſputo; " ac poſtea recluſo per vim ore, ipſas adegi ut deglutirent illud; omnes vero " adhuc vivunt, nec ullo morbo unquam fuerunt correpti; ſed per dulcedinem " novi & inuſitati alimenti apparuerunt mihi quaſi pulchriores, alacriores, & " præter morem fugaces." *Vide* p. 232. — I might give many more experiments: but let theſe ſuffice to excite you to peruſe this noble author, and real friend to truth.

If you aſk how this inſipid liquor acts, in proving ſo ſuddenly mortal: I anſwer; " Si hoc a me expectatis, falleritis: hoc iis annumero, quæ nec ſcio, " nec ſcire ſpero." *Redi's Obſ.* p. 210—212. Some objections were made againſt *Redi's Obſervations*, in *Mr. Charas's* Treatiſe, called *New Experiments about Vipers*; which are ſatisfyingly anſwered by *Redi* in his *Epiſtola*, annexed to his *Obſervationes*, p. 251 ad 293.

Marci Aurelii Sever. Vipera Pythia, i. e. *De Viperæ Natura, Veneno, Medicina, Demonſtrationes & Experimento nova, Patavi*, 1643, 1651, in 4to. ſeems to be fuller of learning than truth or accuracy.

SECT. II.

Vipers are antacid, very nouriſhing, and of eaſy digeſtion; called ſudorific and alexipharmic; and commended in conſumptions, weakneſs, ſcurvy, ſcabies, lepra, French pox, dyſentery, ſmall-pox, meaſles, malignant fevers, agues, peſtilence, diſeaſes of the nerves, poiſons, &c.

" Serpentes vim habent alexiteriam, ſudoriferam, non venenatam. *Uſus* " *præcipui* ſunt intrinſecus in omnibus morbis venenatis, ac malignis, quales " ſunt

" ſunt peſtis, febris petechialis, lepra, & ſimiles. Quinimo & phthiſicos, " Gallicove morbo laborantes, viperarum præcipue uſu juvari, ceu ſecretum " venditat Cardanus. Si ſcilicet caro cocta comedatur, jus bibatur, pingue- " doque ſpinæ & juncturis illinatur. . . Exenteratam & decoriatam carnem, " abjectis tamen felle, cauda & interaneis) ſerpentum, loco cibi aſſumere licet. " Pinguedo emollit ſtrumas, oculorum rubedini & maculis medetur, viſum " acuit, podagricos dolores mitigat. Fel ictibus ſerpentum impoſitum, vene- " noſitatem in ſe allicit; idem & de capite impoſito affirmant. *Præpar.* 1. " Pulvis, &c." *Schrod.* 829.

" Viperarum vires vide in ſerpentum deſcriptione, quas viperæ excellenti " gradu obtinent. Præter eas ſunt qui viperæ caput ad anginam notham " commendant, (collo appenſum). *Præpar.* Oleum, Sal Theriacale, Tro- " chiſci, Sal volatile, &c." *Schrod.* 833.

1. The viper lives on animals, at leaſt as well as on vegetables; is eaten in large quantities, and affords the ſame chymical principles with other animal ſubſtances. " ℥xvj. of dried vipers (the head, tail, ſkin, and guts, being ſe- " parated) yielded ℥x. ʒij. of phlegm, oil, and ſalt; the carbo weighing ℥v. " ʒij. whence a ſmall quantity of fixed ſalt was got. The liquor by rectifi- " cation gave ſalis vol. ℥j. ʒvj; olei nigri ℥ij. ʒiij; ſpiritus ℥iij. & phlegma- " tis ℥iij." Vide *Lem. Chym.* p. 796. So that there evaporated in all ʒv. — 2. Neither head nor tail, gall, nor any other part, whether outwardly applied or inwardly taken, is a remedy or antidote for the poiſon of its bite. Vide *Redi*'s *Epiſt.* p. 287—292; nor does vipers fleſh cauſe any thirſt, or other uneaſineſs, though eaten in pretty liberal doſes. *Redi* gives inſtances of their being uſed, *viz.* one of a perſon who lived moſtly upon vipers, for four weeks uſing them in powder, broth, emulſion; of others who drank wine in quo viperæ ſuffocatæ erant; of another who conſumed in about ſix weeks, ninety vipers, taken in ſummer, and roaſted like eels; &c. yet none of them was in the leaſt troubled with thirſt. *Obſ.* 224—226. *Venia Galeni*, &c. — 3. Vipers are commended in too many diſeaſes, and of too different natures, to deſerve the praiſes given. There is even cauſe to ſuſpect that all their virtues depend on their nouriſhing quality: and that their ſudorific and alexipharmic virtues are to be reckoned to the many vulgar errors that have too long been believed concerning them. They ſoon turn putrid; hence I called them antacid. " Doſ. ad ʒj. in pulv. ad ℥ß. in decocto." *N. B.* 306.

" Viperæ (ἔχιδνης) caro cocta & in cibo ſumpta claritatem oculis affert, " ad nervorum vitia proficit, increſcenteſque ſtrumas reprimit." *Dioſcorid.* l. 2. c. 18. who, after directing how to boil them, and denying they breed lice in thoſe that eat them, adds, " Inſuper vero referunt nonnulli, qui iis veſcantur " longam ſenectutem adipiſci, &c."

They are little uſed here, except in the Theriaca. The Sal volatile Viperarum is no better than the Sal vol. C. C. however much commended by authors. " The volatile ſalt of Vipers is one of the beſt remedies we have in phyſic: " it is good for malignant and intermitting fevers, for the ſmall-pox, apo- " plexy, epilepſy, palſy, hyſteric diſtempers; and for the bites and ſtings of " all the venomous creatures. Doſe a gr. vj. ad xvj. in a proper liquid." *Lem. Chym.* p. 799. Others add pleuriſies, and all the virtues attributed to the Vipers themſelves. However it has no place in the *Edinb.* or *Lond. Pharm.*

But

But in the laſt you have a *Jus Viperinum* and a *Vinum Viperinum.* The Jus is moſt accurately directed. For the Vinum the *Committee* in their plan propoſed Vipers living and intire; but they are ordered dried. See *Dr. Mead's Eſſay of the Viper*, edit. 1745.

LECTURE LXXX.

Containing ſome Juices and Animal Subſtances in Uſe in Phyſic.

AXUNGIA.

SECT. I.

AXungia, Axungia Porci, *offic.* Axungia Porcina, *Ph. Lond.* Hogs-lard, Axunge, or Swines-greaſe.—This needs no deſcription.

If animal ſulphurs are to be diſtinguiſhed by their conſiſtence only, their number is not great; but if by the animals which produce them, they are in a manner numberleſs; though little differing in virtues. How many adipes, axungiæ, butyra, medullæ, pinguedines, ſeva, are to be met with in authors I cannot tell: you have plenty of them in *Schroder's Pharmacopœia*; as alſo in *Dale's Pharmacologia*, to which I refer for the ſynonymous names of the animals which furniſh them, or the like ſubſtances, which I am to conſider only in general.

I have counted about fifteen pinguedines in Hippocrates, twenty-ſix in Dioſcorides, and eighteen in Galen. In the *Lond. Pharm.* preceding that of the edition 1721 there ſtood about forty ſuch fat ſimples; of which ſeventeen were thrown out of the laſt: and now in the edition 1746 Axungia Porcina and Sevum Ovillum only are retained in the M. M. the Axungia Viperina not being mentioned among the ſimples, though ordered in the Unguentum Tutiæ. It was always my opinion that Axunge and Tallow might ſerve for all the Pinguedines, and am glad it is now ſupported by ſo great authority: as is alſo my rejecting, as of no uſe, the Fel, Pulmo, Oſſa, Talus, Stercus, & Veſica Suis, vel Porci, which are among *Schroder's Officinalia nativa.*

SECT. II.

It ſoftens, lubricates, relaxes, corrects alcaline and bilious acrimony, and ſo is anodyne; is uſed only outwardly, as in Unguento Antipſorico utroque, Ung. Arcæi, Ung. citrino, Ung. epipaſtico, Ung. mercuriali, Ung. populeon, and Ung. pomatum, Emplaſtrum defenſivum, Empl. diapalmæ, &c.

"Pinguedo ſuis (adeps abſolute dictus) calefacit minus, ideoque in unguenta "refrigerantia infertur; inveteratos dolores & articulorum ſedat inuncta cum "cinere ſtraminis fabacei aut calce. Lardum coctum & circumligatum oſſium "fracturas feliciter conglutinat." *Schrod.* p. 831.

Animal

Animal fats have all much the ſame taſte and ſmell; and any proper ſpirit they contain is rather putreſcent than aceſcent; and hence they preſerve iron better from ruſt than vegetable oils for the moſt part do. Every animal oil has, perhaps, a proper ſpirit. Dogs can diſtinguiſh ſeveral animals by their ſmell; and this proper ſpirit of each may have proper ſpecific virtues. True. But dogs can alſo diſtinguiſh individuals the ſame way. Does it thence follow that every individual of the ſame ſpecies has proper ſpecific virtues? I think not. Eſpecially ſince experience teaches us, that we can live on a vaſt variety of ſpecies of animals, or on one ſpecies only for a long time, without ſenſibly impairing our health. The Tartars, who delight in horſe-fleſh, are as ſtrong and healthy as thoſe who abhor it and live on beef and mutton.

CASTOREUM.

SECT. I.

Caſtoreum, *offic.* Caſtor.—This is a pretty hard and friable ſubſtance, of a brown colour, of a rank bitter taſte, and ſtrong ſmell; brought to us in bags, two commonly being tied together, of different ſizes and figures, found in the groins, between the umbilicus and pudenda of both male and female Caſtors. The beſt comes from Ruſſia.

Caſtor, *offic. Dale* 407. *Schrod.* 803. Caſtor, *Geſner. Quad. digit.* 309. *Aldrov. Quad. digit.* 276. *Worm. Muſ.* 320. *Ionſ. Quad.* 102. *Charlet. Exer.* 18. Caſtor *ſive* Fiber. *R. Syn. Quad.* 209. The Beaver—is a native of Muſcovy, Poland, Norway, &c. and ſome think anciently of Britain. It is an amphibious animal, very ſagacious; and is well deſcribed in *Mr. Ray's Synopſis Quad.* 209. "Caſtor quaſi γαστωρ, quia eſt animal ventricoſum. Ideoque ridiculi "ſunt qui a caſtrando deducunt. *Fiber*, quod φιβρος habeat pilos, *i. e.* molles: "unde levicula mutatione, aliud nomen ejus Bever, quomodo Belgis vocatur "Bever, Gallis Bievre. The Bever, *aut* Caſtor." *Charlet. Exer.* 18.

It is written καστοριον, καστωρ, and καστορος ὀρχις, in *Hippocrates*, variis locis; καστορος ὀρχις, in *Dioſcor.* l. 2. c. 26. p. 95. "Caſtorium nuncupant "teſticulos Caſtoris." *Galen. Simpl.* l. 11. *fol.* 80. A. For it was a very ancient vulgar error, that the Caſtoreum was the teſticles of the Caſtor; and *Sextius Niger* ſeems firſt to have diſcovered the miſtake. "Eaſdem partes ſibi "ipſi pontici amputant fibri, periculo urgente, ab hoc ſe peti gnari, Caſtoreum "id vocant Medici." *Plin.* l. 8. c. 30. p. 139. "Imitatus Caſtora, qui ſe

"Eunuchum ipſe facit, cupiens evadere damno
"Teſticulorum: adeo medicatum intelligit inguen." *Juv. Sat.* 12. v. 34.

"Spectabilis naturæ potentia in his quoque, quibus & in terris, & in aqua "victus eſt, ſicut & fibris, quos Caſtores vocant, & Caſtorea teſtes eorum. "Amputari hos ab ipſis, cum capiuntur, negat Sextius diligentiſſimus medi- "cinæ. Quinimo parvos eſſe ſubſtrictoſque, & adhærentes ſpinæ, nec adimi "ſine vita animalis poſſe." *Plin.* l. 32. c. 3. "Vanum eſt autem quod nar- "ratur, animal ipſum dum a venatoribus urgetur, teſtes ſibi avellere & ab- "jicere: fieri enim nequit ipſos ut attingant, quippe qui ſint, velut in ſue

"ſub-

" ſubſtricti." *Dioſcor.* l. 2. c. 26. However *Rondeletius* (qui obiit 1566.) and ſince him many others, have ſufficiently explained the ſtructure and ſituation of theſe Caſtoris folliculi. Vid. *Joh. Franci Caſtorologia*, " explicans Caſtoris " animalis naturam & uſum medico-chemicum; antehac a Joh. Mario Bol- " lenſi, & phyſico Ulmano, poſtea Auguſtano labori inſolito ſubjecta: eam " vero ejuſdem autoris & aliorum medicorum obſervationibus luculentis in- " editis, adfectibus omiſſis, & propria experientia, parili labore aucta." *Auguſtæ Vindelicorum* 1685. in 8vo; alſo *Bib. Pharm.* 1. p. 490—512; and the *Acta Lipſiæ* 1684. p. 360, where there is a Diſſectio Caſtoris maris & fœminæ.

" Infertur Caſtoreum officinis ex variis regionibus, plurima tamen copia ex " Poloniæ regno, & Ruthenico imperio; tum etiam ex India orientali & " occidentali. Optimum cenſetur quod Dentiſcani vendunt negotiatores, ex " Polonia, Ruſſia, Pruſſia, eo comportatum, Dantiſcanum hinc vulgo dictum. " Canadenſe viliſſimum æſtimatur, quia fere expers odoris, & is quem ex- " halat ingratus eſt; unde multi, quamvis immerito, illud cenſent adultera- " tum. Omni autem Caſtoreo præfertur illud quod ex oriente importatur. " Vid. *Mem. Acad.* 1712." *Rieger. Introd.* ii. p. 583. " Figura Caſtoris Ruſ- " ſici ex ipſo animali in Ruſſia depicta, mihi communicata eſt valde quidem " diverſa ab imagine Caſtoris Canadenſis, cujus delineatio mihi eodem tem- " pore facta eſt." *Dale* 408. *Are they ſpecifically different?*

SECT. II.

Caſtor is antacid, attenuant, detergent, diaphoretic, and carminative; called cephalic, nervine, and alexipharmic; and commended internally in lethargies, vertigoes, palſy, convulſions, epilepſy, ſpleen, vapours, colic, hickup, palpitation of the heart, green-ſickneſs, difficult labour, grindings, malignant diſeaſes, narcotic poiſons, &c. and externally for deafneſs, pains, and ringing of the ears, &c.

" *Officin.* Axungia, teſticuli, qui Caſtorium vocantur, & pellis. 1. Axun- " gia peculiariter nervoſo generi ac utero convenit, adeoque morbo comitiali, " membris reſolutis, convulſis, apoplexiæ, &c. 2. Caſtorium, calfacit 3. " ſiccat 2. attenuat, aperit, flatus diſcutit, nervos, nervoſaſque partes, adeo- " que caput roborat, ſpiritus animales torpidos excitat, venenis reſiſtit, ſter- " nutationem ciet, anodinum eſt, menſes promovet. Hinc proficuum eſt in " lethargo, apoplexia, epilepſia, paralyſi, vertigine, artuum tremore, de- " fluxionibus ad articulos, ſtrangulatu uteri, dolore colico, idque uſu tum " externo tum interno. Inſuper tinnitus aurium, ac difficultatem audiendi " corrigit (auri inditum) dentiumque dolori ſuccurrit. *N.* in ſtrangulatu uteri, " admovetur naribus, ſubligatur axillis, inditur umbilico. Opii virulentiam " corrigit. 3. Pellis opem fert podagricis & paralyticis (parata & induta). " *Fræp.* 1. Oleum infuſum. 2. Ol. ſtillatitium. 3. Electuarium Diacaſto- " rium. 4. Extractum cum ſp. vini rectificato." *Schrod.* 803.

1. It is of a diſagreeable bitteriſh rank taſte, and ſtrong heavy ſmell. " Saporis acris, amaricantis, nauſeoſi, odoris gravis." *Herm. Cyn. part.* ii. 45. " Saporis acris, amaricantis, nauſeoſi; odoris gravis & fragrantis." *Dale* 408.

" Odoris fortis, fœtidi, & penetrantis; ſaporis acris, calidi, ſpecifici." *Nucl. Belg.* 67. — 2. It flames in the fire, gives a deep tincture to ſpirit of wine, and diſſolves equally in aqueous and ſulphureous menſtruums. " Solvitur " tam in ſpirituoſis & oleoſis, quam in aquoſis menſtruis. Videtur eſſe ſpecies " quædam ſalis volatilis oleoſi, cui multæ partes terreſtres ſunt admiſtæ." *Rieger. Introd.* ii. 582. Hence it appears to be a ſaponaceous ſubſtance, and acts not by its ſingular ſtimulus only, but alſo as a ſubtile detergent; yea ſeems to rarify the juices: conſequently it is not proper in bilious, inflammatory, and putrid diſeaſes. It is ſaid to be a ſpecific corrector of opium; and yet to be anodyne itſelf: and both theſe qualities it may partake of in ſome degree as it ſtimulates: but I find nothing ſpecific here. — 3. It is commended by both ancient and modern authors in more diſeaſes than I have named. In a word, it may do ſervice, *ubicunque natura languet.* Of what uſe is it to the animal itſelf?

SECT. III.

Caſtor may be given in ſubſtance to ʒß. in infuſion to ʒj: the Tinct. Caſtorei to ℥ß. which contains the tincture of ʒß. in rectified ſpirit. Caſtor is an ingredient in the Tinctora ſudorifica, Pulvis ad partum, Mithridatium, Theriaca utraque, Pilulæ fœtidæ, Pil. gummoſæ, Pil. pacificæ, Trochiſci de myrrha, & emplaſtrum cephalicum.

The Tincture of Caſtor in the *London Diſp.* is drawn with proof ſpirit. Is this better than the rectified? How much does either diſſolve? How much riſes by a ſimple diſtillation? Is *Rieger* above cited right?

The quantity in which *Hippocrates* gives it is ob. 1. but in *Dioſcorides* the doſe is ʒij. " Datur a gr. v. ad gr. xij. *Schrodero*;" ad ϑß. *Nucl. Belg.*" " Datur " a ϑj. ad ʒß. in majori doſi datum alvum ſolvit." *Herm. Cyn.* 245.

N. B. Vide *James's Pharm.* p. 74. but eſpecially *N. Diſp.* p. 110. where we find " Water extracts the nauſeous part, with little of the finer bitter: " rectified ſpirit extracts this laſt, without much of the nauſeous; proof ſpirit " both: water elevates the whole of its flavour in diſtillation: rectified ſpirit " brings over nothing. Caſtor is looked upon as one of the capital nervine " and antihyſteric medicines: ſome have nevertheleſs doubted of its virtues; " and Newman and Stahl declared it inſignificant. For our own part, we " never could find it anſwer the character which has been uſually given of it.

CERVUS.

SECT. I.

Cervus *offic. Dale* 402. *Schrod.* 805. Cervus, *Geſn. Quad.* 326. *Aldrov. Quad. biſulc.* 769. *Ionſ. Quad.* 58. *Charlet. Exer.* 11. Cervus, *Græcis* ἔλαφος, noſtratibus Red Deer: Mas, a Stag vel Hart dicitur; fœmina a Hind; fœtus ſeu pullus, a Calf. *R. Syn. Quad.* 84. The Hart.

Stags loſe and renew their horns every year: they begin to ſprout in March, are ſoft and eatable, being covered with a downy ſkin (whence they are called

velvet horns) until July, when they are come to their full growth, harden, and loſe their ſkin: thus they continue to the ſucceeding ſpring, when they break off, and give place to new ones, which begin to appear in ten or twelve days after. They are called calves or fawns till a year old, and have no horns. The ſecond year they get a ſingle or ſtreight horn, and are called Brochs, Brockets *(à Gall. broche)* and Prickets. The third year the horns are bifid, or have one branch; and the animals are called Sorells. The fourth year the horns are trifid, or have two branches, and then they are called Stags or Bucks; and not ſooner in the language of gentlemen hunters. And afterwards the horns are ſaid to be branched till the full head. Vid. *Ariſt. H. An.* i. 706. "Conſtat tamen in multo plures ea ramos dividi ante quartum annum." *Charlet. Exer.* p. 11. Quando palmata dicenda?

If a Fawn be caſtrated it never gets horns; if when a Pricket, it continues a Pricket ſtill, the horns neither branching nor ever falling off. The ſame holds of the Sorells, &c. for as the head is at the time of caſtration, ſo it continues during the animal's life. Vide *Ariſtot. Hiſt. Animal.* l. 10. c. 50. D. It is ſaid alſo that in theſe things the male of all the Cervinum genus (*i. e.* animalia quadrupeda, ruminantia, biſulca, cornibus deciduis ramoſis *Raii*) agree: and none but the males carry any horns. Vide *Redi Opuſcul. Tom. ult.* p. 116. The Red Deer are natives of Britain, and many other countries.

"Cervi *officin. nat.* 1. Cornu. 2. Corium. 3. Os de corde. 4. Geni-"tale. 5. Teſticuli. 6. Sanguis. 7. Lachrymæ. 8. Medulla. 9. Sevum. "10. Talus *ſeu* Aſtragalus. 11. Lapis." *Schrod.* p. 805. According to our Diſpenſatory Cervus furniſhes the ſhops with a Cornu, Os è corde & medulla. But the Cornu only is officinal, and as ſuch ſtands in the *London M. M.*

Deer are ſaid to live a hundred (yea ſome hundreds of) years; and the arteries, in and near the baſis of the heart, to turn cartilaginous and oſſify by age, affording what is called os e corde Cervi. *Veſalius*, *Rondeletius*, and *Braſavolus*, think it fabulous that bones are ever found in a ſtag's heart. But, whatever is in this, ſure I am ſuch bones as the ſhops furniſh under that name do not in the leaſt reſemble cartilaginous or oſſified arteries; but are really oſſa e corde boum; of which I have two or three which I took out with my own hand. They are of different figures and ſizes, according to the age and bulk of the bull, ox, or cow, out of which they are taken. I have examined I do not know how many hearts, and found a bone in every one of them; but never in a calf's heart. When do they begin to be formed? "The bone found "in the heart of a ſtag is about half as long as the little finger, broad as the "nail, flat, thin, commonly triangular, and of a white colour. Chooſe it "rather ſmall than great; for the bone of an ox's heart, which is larger and "not otherwiſe different, is ſold for it." *Lem. Dict.* p. 135. But the ſmalleſt there, and that I ever ſaw, I took out of a cow's heart, and it is not the half of the length or bigneſs which Mr. Lemery aſſigns them. In one, an. 1750, I found two bones; one very large, and another very ſmall: as I did alſo in another in Autumn, 1755.

SECT. II.

Hartſhorn is antacid and nouriſhing, affording plenty of gelly of as eaſy digeſtion, and perhaps every way as good, as viper broth; called antiſeptic, ſudorific,

ſudorific, alexipharmic; and commended in the ſmall-pox, meaſles, malignant fevers, pleuriſy, conſumption, epilepſy, fluxes, hæmorrhages, &c.

" Cornu crudum reſiſtit putredini, malignitatem corrigit, ſudorem ciet, " balſamum humanum corroborat. Hinc *uſus* ejus proficuus in variolis, " morbillis, febribus putridis & malignis, aliiſque morbis ubi ſudore opus eſt. " Incoqui poteſt decoctis, macerari in infuſionibus, quippe in ſubſtantia exhi- " bitum, crudum fere egeritur. *Præparata* ex cornu, &c." ac vires cæterarum partium videantur in *Schrod.* p. 805—807.

1. The crude horn ſeems too hard for the ſtomach; yet ſince vinegar corrodes it, and ſuſpended three days in the vapour of boiling water it became white and friable (which is called calcinatio philoſophica), and by decoction in water a ſtrong but ſoft and almoſt inſipid gelly is got from it, it is not improbable but our ſtomachs may digeſt it in part, if raſped fine; though thus it is needleſs to uſe it, the gelly containing all its virtues; yea and the virtues of every part of the animal which is commonly uſed. — 2. This gelly, gelatina, or gabreda, as it is called in authors, is putreſcent like other animal fluids, ſo very improperly called antiſeptic, and as improperly uſed in putrid and inflammatory diſeaſes, as alſo in hectic conſumptions; unleſs well qualified with ſome acid juice, as ſuccus limonum vel aurantiorum, as in the gelatina C. C. *Pharm. Edinb.* or mixed with ſome gelatina ribeſiorum. Tho' taken per ſe I reckon it no way inferior to the very formal and ſumptuous jus viperarum I mentioned above. — 3. By a chemical analyſis cornu cervi ℥xv gave ſalis volatilis ʒivß, ſpiritus volat. ℥iv. ʒvij, & carbonis ℥ix. ʒii. According to *T. Mem. Acad.* 1700. Here is no mention made of the oil. Were there ʒijß olei, and was nothing loſt? *vide* Sericum *infra.* Hence it appears that vipers yield much more volatile ſalt than hartſhorn. But what then? So does the hair of one's head. " Twelve ounces of hair yield ſalis volatilis ℥j. ʒvij, " olei nigri ℥iij, ſpiritus ℥ij. & phlegmatis ʒix. there remaining carbonis ℥iiiß." *Lem. Chym.* p. 796. ſo that ℥ß was loſt. But—4. The ancient Greeks uſed only the calcined hartſhon, and that inwardly, as drying and aſtringent, for fluxes and hæmorrhages; and outwardly for ſore eyes and foul teeth. Vide *Hippoc. de Morb. Mul.* l. 2. p. 667. lin. 14. and 669 l. 48. *Dioſc.* l. 2. c. 63. p. 102. *Galen Simpl.* l. 11. fol. 79. G. It is true ſome attributed an alexipharmic virtue to the right horn; as, " Cervus etiam dextrum cornu fodiens " abſcondit, quod contra venena e rana rubeta, aliaque auxiliatur." *Theoph.* (*De Animal. quæ dicuntur invidere*) p. 474: others to the left; as, " Cornu " ſiniſtrum a nemine compertum eſſe adhuc fertur: occulit enim id (cervus) " tanquam quodam medicamento præditum." *Ariſtot. H. Animal.* l. 9. c. 5. p. 706. D. " Cervi morſi vel a phalangio vel a quovis ejuſdem generis, " cancros edunt." *Ibid.* G. " Cervi viperas edunt, quibus cætera (animalia) moriuntur." *Theoph. Cauſ.* l. 4. c. 10. p. 310. *Pliny*, l. 8. c. 32. & *al. loc.* ſays, " Et iis eſt cum ſerpente pugna inveſtigant cavernas, nariumque ſpiritu " extrahunt renitentes. Ideo ſingularis abigendis ſerpentibus odor aduſto " cervino cornu. Contra morſus vero præcipuum remedium ex coagulo hi- " nuli in matris utero occiſi. . . Febrium morbos non ſentit hoc animal, quin " & medetur huic timori. Quaſdam nos principes fœminas ſcimus omnibus " diebus matutinis carnem eam deguſtare ſolitas, longo ævo caruiſſe febribus, " quod ita demum exiſtimant ratum, ſi vulnere uno interierit. . . . . Exilio

" (ait) his (ſerpentibus) eſſe cervos nemo ignorat, ut ſi quæ ſunt extractæ " cavernis mandentes. Nec vero ipſi ſpirantes tantum adverſantur, ſed mem- " bratim quoque. Fugari eas nidore cornus ſi uratur, dictum eſt. . . . Pellis " ejuſdem animalis ſubſtratæ, ſecuros præſtant ab eo metu ſomnos. Coagu- " lum quoque ex aceto potum ab ictu; & ſi omnino tractatum ſit, eo die non " ferit ſerpens. Teſtes quoque ejus inveterati, vel genitale maris ſalutariter " dantur in vino. . . Fugiunt & omnino dentem cervi habentes, aut medulla " perunctos, ſevove cervi aut hinuli, &c." And further, " Mulierum purga- " tiones adjuvat. . . Cornus cervini cinis potus. . . Vulvas & pilo cervino ſuf- " fire prodeſt. Tradunt cervas cum ſenſerint ſe gravidas lapillum devorare; " quem in excrementis repertum, aut in vulva (nam & ibi invenitur) cuſtodire " partus adalligatum. Inveniuntur & officula in corde & in vulva, per- " quam utilia gravidis parturientibuſque." l. 28. c. 19. Some attribute great virtues to both horns, as well as to ſeveral other parts: but their accounts are ſo ſtuffed with fables as to merit little attention; however much inſiſted on by the Arabians and their followers. — 5. And laſtly, Deers-fleſh, teſtes, velvet-horns, kidneys, &c. are eaten freely and plentifully, as well as beef or mutton, and with the ſame effect. In a word, if there be any ſpecific virtues in this animal, the horns have as good a claim to them as any other part, yea as all the other parts. The gelly contains all of the crude horns that is nouriſhing, and all that is digeſtible: the calcined horns are only a lean (*vix* abſorbent) earth, no better than any burnt bones.

Can the os e corde cervi, ſuppoſe it were genuine, corroborate the heart more than the arteries, of which it is ſaid to be formed? or the arteries more than the heart itſelf? or the heart more than any other muſcle? " Qui mi- " rificam ei in roborando corde vim tribuunt, veriſſime falluntur. Inter " Græcos recentiores Actuarium producit Sylvius, qui cor roborare dicat " totius ſubſtantiæ ſimilitudine. Huic conſentiunt Arabes. Addit Sylvius, " An cartilago hæc ſubſtantia magis præſtare id queat, quam cordis & arte- " riarum corpus, ipſi viderint. . . Ego paucis me abſolvo; eſt os, neque fa- " cultatem ab aliis offibus peculiarem habet." *Hoffman*, p. 520.

The common ſaying, *ſimile ad ſimile tendit*, like draws to like, has been advanced to ſupport a very groundleſs opinion, *viz.* that the heart is more cordial, the lungs more pectoral, &c. than the other parts of the ſame animal. I call it groundleſs, becauſe not ſupported by experience. For before ſuch animal ſubſtances can nouriſh or ſtrengthen any viſcus, their texture muſt be diſſolved; and if they are quite natural when taken, the action of our organs on them muſt alter their nature, and ſo render them more acrid, or leſs natural, and conſequently leſs fit to nouriſh the part they reſembled. And in fact we find that all the chicken is not only nouriſhed by, but even in a manner formed out of, the albumen, until it be hatched: and that gelatina C. C. is by far more cordial than the Cor Cervi itſelf. But granting there were ſomething in the common proverb, in what are the pulmo vulpis, hepar lupi, teſtes equi, &c. preferable to the pulmo, hepar, teſtes, &c. agni, vituli, porci, &c. It has been too much the reproach of medicine, that ever ſuch abominable ſtuff ſhould have been numbered among remedies. Theſe abominanda cannot be called more ſimilar to the like parts of a man than a ſow's are. I might here take notice of the cannibals; but of them under the article *Mumia*.

The epilepsy is one of the diseases in which *C. C.* is commended: and if it proceeds from acids in the stomach, *C. C. C.* may do service, if it be absorbent; which I fear it is not, but rather useless: though in powder it must be as good as the cranium humanum, which too long passed for a specific antiepileptic. For, to pass by its hardness, indigestibility, or chymical principles, &c. this virtue is not at all confirmed by experience. Since, 1. Some attribute it to the cranium simply, as *Ph. Edinb. Lond. edit.* 1721, &c. 2. Others to the cranium hominis violenta morte extincti, in which the brain has putrified. "Saltem os capitis valet ad epilepsiam, non item ossa reliqua; tum demum "cerebrum totum in cranio consumitur & liquescit, cujus liquoris irroratione "continua, vires cranium acquirit alias, quas aliis abesse ossibus animadverti- "mus." *Helmont, Magnet. Vuln. curat.* p. 712. § 51. sub finem. Vid. *Hoffm. in Schrod.* infra. 3. Others to such parts of the cranium as are separated while the person is alive. "Cranium contra epilepsiam tanquam specificum com- "mendatur, in quo cerebrum totum consumptum & liquidum redditum, "quale suspensorum, aut rotæ impositorum, cujus liquoris irroratione cranium "vires acquirit majores. . Si frustula cranii de homine sano, adhuc in vivis "constituto, qui olim vel cæsim, vel globo plumbeo in cranio læsus fuit, "haberi possent, majoris essent virtutis. Prout notus mihi fuit Juvenis iste "Hallensis, cujus mentionem fecit Freitagius, in Horstii Obs. l. 2. qui ex "bombarda mosqueta plumbeo globo tactus in vertice, ubi futura sagittalis "cum lambdoïde concurrit; hic senex tandem factus, de particulis istis ossium, "de cranio evulsorum, quorum No. 85. pondere fere quadrantis libræ fuere, "ad parentum desiderium multis gratificabatur & opitulabatur infantibus epi- "lepticis, sed, quod notandum, non sine cephalalgia ipsum semper post per- "actam illorum distributionem infestante." *Hoffm. in Schrod.* 612. A credible story indeed! 4. Others to the cranium only when prepared by repeated levigations with cephalic waters, (such as aquæ florum lilii convalli, tiliæ, pæoniæ, cerasorum nigrorum) and exsiccations successively. Vid. *Pharm. Aug. Zwelferi*, p. 414. While, 5. There are who think only the ossa triquetra, found sometimes in the sutures, of any use in this disease: "Qui omnem "operam perdiderant in indagando remedio epilepsiæ universali, tandem ve- "nerunt ad cranium humanum calcinatum. Verum cum & ipsum destitueret "illos, invenerunt latibulum, non totum id facit, sed os triquetrum, quod in "quibusdam calvariis est, in laxa illa sutura quæ λαμβοειδης dicitur. Eum "in finem multa Turcarum capita aperta fuere a doctoribus castrensibus, quo "anno (1595.) Strigonium fuit captum. Sed & pauciora inventa sunt, & "nullius peculiaris affectus." *Hoffm.* p. 519. Hence I infer *cranium esse nullius usus in epilepsia*; no better than a hog's scull: and as it is thrown out of the pulvis ad guttetam, it ought to be expelled the *M. M.* however much the French use it.

SECT. III.

Hartshorn, calcined and prepared, may be given in substance, like chalk, to ʒj. or ʒij. in infusion or decoction ad libitum. It is used in the decoctum album utrumque. And from the crude horn are distilled a volatile salt and spirit, and an empyreumatic oil: the remaining carbo calcined to whiteness in an open fire is the *C. C. C.*

You

You have the proceſs in *our Pharm.* p. 157; and ſome judicious obſervations on it in *Lewis's Pharm.* p. 263—269: to which I refer you; and only add, that old blanched horſe bones, hoofs, hair, &c. afford as good volatile ſalt, as hartſhorn, which now perhaps is little employed that way.

Sal volatile C. C. or rather ſimple ſal C. C. *offic.* differs not in virtues or ſtrength from ſal volatile ſalis ammoniaci. The ſpiritus C. C. if as ſtrong as it ought to be, is only the phlegma impregnated with as much of the ſalt as it can diſſolve. . . . . Common water, in a temperate air, diſſolves about half its own weight of ſal C. C. (vide *Boyle's Experim. and Obſerv. Phyſ.* p. 151.) So the doſe is eaſily adjuſted. " Sal C. C. datur a gr. v. ad ℈ß. *Schrodera:* " a gr. iij. ad ℈j. *Le Mort:* a gr. vj. ad xij. vel ℈j. *Maetſio, Col. hym. Leid.* " 162. a gr. vj. ad gr. xvj, *Lemerio.*" " The doſe is from gr. iij. to xij. xv. " or xx." *Quincy's Pharm.* p. 331.

Oleum C. C. *offic.* is an acrid, empyreumatic, nauſeous oil; called ſudorific, and outwardly anodyne; and commended inwardly where ſudorifics are indicated; and for rheumatic pains, the gout, &c. outwardly. Vid. *Van Swieten in Aphoriſ. Cel. Boerhaavii*, Vol. I. p. 638. It is of an abominable taſte and ſmell, and may do as well as burnt feathers held to the noſe in hyſteric fits. " Ingrati valdè eſt ſaporis, unde minus in uſum venit. Externè vero dolori- " bus podagricis & arthriticis illinitum prodeſt. Eaſdem etiam vires cum " ſale volatili obtinet. Doſis a gut. ij. ad xij." *Le Mort.* " Doſis olei gut. v. " aut vj. plerumque cum aliis ſudorificis." *Margrav. Col. Chym. Leid.* p. 163. Vide *Lem. Chym.* p. 792 ad 804. *Boerh. Chem.* ii. 354—370. Nugamur paululum.

" In phyſic no figure of ſpeech is allowable, which carries off the mind " from the images and cloſe repreſentations of the thing in deſcription . . . (!) " For inſtance, what can a man form in his own mind from this explanation " of *Dr. Fuller*'s of the operation of hyſterics? " Fetid medicines take off " hyſteric fits by handling the ſpirits roughly, and driving and diſperſing " them. For when they grow mutinous and unequally diſperſed, running in " tumultuous crouds in ſome places, and leaving others almoſt ungariſoned; " and ſo either intermit their duty within the precincts of the brain or præ- " cordia, or elſe do it perverſely: then the beſt courſe is to ſend ſuch a ſtern " remedy among them as may uſe ſevere diſcipline, and laſh and ſcourge " them, till they are glad to leave their diſorders, and run to their proper " poſts, and fall to their charge again, &c." *Quincy's Pharm.* Pref. p. ix. Vide *Jul. hyſtericum. Ful. Phar.*

" The ſalt of hartſhorn extremely rouzes the ſpirits, and contributes to their " regular motions. It is of an infinite ſervice ſometimes at the cloſe of an " unmerciful fever, which has burned up the vitals, and tore the conſtitution " quite out of frame, ſo that life is as a glimmering ſnuff, which may tenderly " be cheriſhed into vigour again: herein it ſupplies the parched fibres with " freſh fluid ſuited to their exigencies, and helps to keep on the main ſprings " and motions of life, till the enemy is critically diſcharged, which otherwiſe " might languiſh, and at laſt ſtand ſtill." *Quincy's Pharm.* p. 330. I leave you to judge which is moſt figurative, and whoſe figures are moſt juſt. But how a cauſtic ſalt ſhould tenderly cheriſh burnt up vitals, or ſupply freſh fluid to the parched fibres, I own I do not underſtand.

" Carbo,

" Carbo, a deſtillatione cornu cervini, reſtans, redactus in pulverem, jejuno " homini datus, anthelminticum præbet optimum." *Boerh. Chem.* ii. p. 359. Vide *Van Swieten in B. Aphor.* Vol. I. p. 638, 666, and 742.

EBUR.

SECT. I.

Ebur, Dens Elephanti, *offic.* Ivory or Elephant's Tooth—is a long round horn, growing one on each ſide of the Elephant's upper jaw, of the colour and conſiſtence of a ſolid bone, without taſte or ſmell.

Elephas, *offic. Dale* 405. *Schrod.* 808. Elephas, *Charlet. Exerc.* p. 4. Elephantus, *Geſn. Quad.* 17. *Aldrov. Quad.* 418. *Ionſt. Quad.* 17. *R. Syn. Quad.* 131—142. The Elephant. " Vel ab Hebraico Alaph, diſcere, quod doci- " litate reliqua animalia ſuperet, nomen habet: vel ab Eleph, bos, quia mag- " num eſt animal," *Charlet. l. c.* " Elephantos Italia primum vidit, Pyrrhi " regis bello, & bovis Lucas appellavit, in Lucanis viſos. A.U. 472." *Plin.* l. 8. c. 6.

It is the largeſt of all quadrupeds, being ſometimes fifteen feet high, with horns ſix feet long, and a long trunk which ſerves inſtead of hands. One of its horns will ſometimes weigh more than 160 pounds. Travellers relate many wonderful ſtories of the docility and ſagacity of this huge animal. With *Ebur* we ſhall conjoin two other ſubſtances, though little uſed, yea of little uſe, in medicine, viz. *Dens Apri*, and *Dens Monocerotos*.

1. Dens Apri, *offic.* The Wild-Boar's Tooth, is ſometimes ſix or ſeven inches long, crooked, deſcribing ſometimes more than a ſemicircle, very hard, of the grain of ivory, and are its weapons, two growing on each ſide of the lower jaw.

Aper, *offic. Dale* 404. *Schrod.* 792. Aper, *Geſn. Quad.* 918. *Aldrov. Quad. biſulc.* 1013. *Ionſt. Quad.* 74. *Charlet. Exerc.* 13. Sus agreſtis *ſive* Aper, *R. Syn. Quad.* 96. The Wild Boar, or Wild Swine. " Sus, ὑς, a Swine, cujus varia " occurrunt nomina, viz. Porcus, χοιρος, a Hog; Scropha, γρομφας, an old " Sow; Verres, a Boar; Aper, a Wild Boar; Maialis, Verres caſtratus, a " gelt Hog or Barrow Pig." *Charlet. l. c.* vide *Ibidem* quæ ex carne, &c. conficiuntur. It is a very fierce animal, in many things differing from the Tame Swine. *R. Syn. Quad.* &c.

2. Dens Monocerotis, Cornu Unicornis, *offic.* The Horn of the Unicorn fiſh. This is nine or ten feet long, round, tapering, and as it were twiſted, of the colour, grain, and conſiſtence of ivory: it grows out of the left ſide of the upper jaw of a large fiſh, called

Monoceros, Unicornu, *offic. Dale* 379. Unicornu marinum. *Worm. Muſ.* 252. Unicornu, ſive Cornu Monocerotis, *Park. Theat.* 1611. Monoceros, Unicornu marinum, *Charlet. piſc.* 47. Monoceros, piſcis è genere cetaceo, Narhual iſlandi., *R. Syn. piſc.* 11. The Unicorn fiſh, or Narhual. " Sep- " tentrionalibus dicitur Narhual, a cadaveribus quibus veſcitur; Nar enim " piſcis cadaver dicitur. . . In freto Davis haud rara hæc animalia; & circa " Groenlandiam. *Worm. l. c.* This fiſh is ſometimes very large. *Tulpius*

(Obſ. l. 4. c. 59.) deſcribes one eighteen feet long, and twelve broad; with a horn nine feet long, of which $7\frac{1}{2}$ feet were without the jaw. *Wormius* deſcribes another.

For what the Reem *S. S.* tranſlated unicorn, μονοκερως, *Numb.* xxiii. v. 22. and *Deut.* xxxiii. v. 17, &c. is, conſult *Patr. Comm.* i. p. 667. and p. 900: by which it appears not to be the Rhinoceros; far leſs this fiſh; though its horn only is kept for it in the cabinets of the curious..—De Unicornu ſcripſere *A. Baccius*, *J. B. Sylvaticus*, *P. L. Sachſius*, *W. Gabelchoverus*, *C. Bartholinus*, *A. Denſingius*, &c.

SECT. II.

The gelly of ivory is of the ſame nature with that of hartſhorn. Whether the other two teeth will yield any I know not. Volatile ſalt, ſpirit, and empyreumatic oil may be drawn from them all. I know not that they have many peculiar virtues, though many are given them.

" Ebur refrigerat & ſiccat, moderate aſtringit, incidit, viſcera roborat, " albas mulierum fluxiones ſiſtit, ictero convenit, lumbricos fugat, diuturnis " obſtructionibus confert, ſtomachi dolores, & imbecillitatem abigit, epilep- " ſiæ medetur, melancholiam arcet, putredini ac venenis reſiſtit. Adhibetur " ejus limatura in infuſionibus, quin & pulvis in ſubſtantia exhibetur. Doſis " ʒß. *Præp.* 1. Ebur uſtum, ſpodium ex ebore vocant. 2. Trochiſci de " ſpodio. *N.* Sunt qui Ebur ad fæcunditatem commendant: verum cum ſit " animal paucæ prolis, tarde pariens (biennium *ſc.* gravidum) potius ad ſte- " rilitatem fœtuſque retentionem facere conjecturatur, quam ad conceptionem " promovendam." *Schrod.* 808. " Elephantini dentis ramentum, parony- " chias curat impoſitum. Vim porro ſtypticam habet." *Dioſcor.* l. 2. c. 61.

" *Officin. nat.* Apri adeps, dens, genitalia, fel, ſtercus, urina, dens ſpeci- " fice in pleuritide exhibetur; cynanchen (cum oleo lini inunctus, vel & ex- " hibitus) curat. Doſis ʒj. *Præpar.* &c." Vide *Schrod.* 792.

" Unicornu cornu ſudoriferum eſt, alexipharmacum, ac cordiale. Hinc " laudatur adverſus venena, morbos contagioſis, &c. Proficuum quoque " cenſetur in epilepſia infantum. Doſis a gr. iv. ad ʒj. & ultra." *Schrod.* 835. Some authors pretend to prove its extraordinary alexipharmic virtues by experiments on dogs, cats, pigeons, &c. after not only nux vomica, but even arſenic and corroſive ſublimate, had been given them. See *Muſ. Worm.* p. 252. and *Cornel. Stalpertii Diſſertationem de Monocerote*, in *Mangeti Bibl. Pharm.* ii. 331, &c. At fides ſit penes authores.

LECTURE LXXXI.

FEL BOVIS.

SECT. I.

FEL Bovis vel Tauri, *offic.* The Gall of an Ox or Bull.—This is the thick yellow liquor collected in the gall-bladder, of a very nauſeous bitter taſte, and fetid ſmell, unleſs well dried.

I find

I find in *Hippocrates* Fel Bovis, Capræ, Scorpii marini, ſuis; making Fel Bovis & Tauri the ſame: in *Dioſcorides*, Fel aquilæ, callionymi piſcis, capræ, gallinæ, hyænæ, ovis, perdicis, ſcorpionis marini, ſuis, Tauri, teſtudinis marinæ, urſi: *Galen* adds Fel accipitris. In the *old Lond. Pharm.* were eight kinds of galls, viz. Accipitris, Bovis, capræ, leporis, milvi, ſuis, Tauri, urſi. In *edit.* 1721. there were only two or three, *viz.* Bovis, leporis, Tauri: in the *preſent Lond. Diſp.* none at all. Ox-gall may ſerve for all.

Bos, *offic. Dale* 400. Bos, *Geſn. Quad.* 25. *Aldrov. Quad. biſulc.* 13. Bos domeſticus, *Ionſ. Quad.* 26. *Charlet. Exerc.* 8. *R. Syn. Quad.* 78. The Ox. "Mas Taurus the Bull dicitur; fœmina Vacca, the Cow; Fœtus Vitulus, "the Calf. *Uſus.* Cornu, fel, jecur, ſplen, ſanguis, medulla, axungia ſeu oleum "ex pedibus, ungulæ, urina, ſtercus, lapilli, lac, butyrum, caſeus, priapus, "oſſa." *Dale* 400. è *Schrodero* 793. But the caro, here omitted, is of more uſe than all the ſixteen, lac excepted.

SECT. II.

Bile is antacid, detergent, and a pretty acrid and cathartic natural ſapo; called anthelmintic; and commended inwardly in obſtructions of the viſcera, jaundice, cachexy, &c. and outwardly for deafneſs, pains of the ear, and (in ointments and clyſters) for coſtiveneſs. It is an ingredient in the Unguentum Vermifugum, otherwiſe now but little uſed, except to clean pictures, and waſh ſilks and printed calicoes.

The Bile or Gall is one of the moſt elaborate, moſt uſeful, of the animal juices; being a principal inſtrument in digeſtion, &c. as appears by the conſequences following any obſtruction of the cyſtic duct: and alſo the moſt medicinal of them all: but it is ſo nauſeous as not to be eaſily taken. "Bilis "cyſtica reſiſtit aceſcentibus; aliaque admiſtione ſui, ſimili facultate imbuit; "ſaponacea eſt, abſtergit, olea aqua miſcibilia reddit, reſinas, gummi, tena- "cia quæque reſolvit, attenuat, homogenea facit; nec alcalina nec acida, ſed "oleo, ſale, ſpiritibus inprimis concrevit aqua dilutis; non combuſtilis, niſi "ſiccata prius, acerrimus humorum circumductorum corporis. Quare effec- "tus ejus, ſi chylo fæcibuſque affuſa miſcetur, conteriturque ſunt attenuare, "reſolvere, abſtergere, fibras motrices ſtimulare; diverſiſſima quæque per- "miſcere, acria ſalina obtundere, coagulata dividere, vias expedire chylo, "appetitum excitare, fermenti vicem gerere, cruda coctis aſſimilare." *Boerh. Inſtit.* § 99. Obiter.

Here it may be aſked, if the cyſtic bile, mixed with the chyle, enters the lacteals, why is not the chyle, and milk too, bitter? If it is anſwered, as it acts on and changes the aliments, ſo it is acted on and changed by them: how comes it then to appear unchanged in the fæces, which are white without it? The fæces may be yellow, and yet not bitter or acrid: and we know ſwine and dogs eat them. But again, if the bile be thus changed by mixing with the aliments; how comes it ſo to ſtimulate the guts, as to keep the belly more open than when the cyſtic duct is obſtructed. Perhaps it keeps the belly open by thinning the fæces and lubricating the inteſtines, not by ſtimulating the guts. But then, if that attenuating quality

remain after it is mixed with the aliments, it will remain in the chyle alſo, and ſo act on the blood as the bile does in the jaundice. Since therefore no ſuch effect is ever obſerved, and it is plain that the colour is precipitated in the inteſtines, it appears to be more than probable that only ſo much of the bile enters the lacteals as is ſufficiently changed, and ſo is no more bile; and what is not ſo altered is diſcharged with the fæces. Since therefore this natural ſapo, while acrid, cannot enter the lacteals, no wonder that many other ſubſtances, however fluid, as acria, acida, aſtringentia, &c. are alſo excluded, till they be ſufficiently changed in the primæ viæ; and when that cannot be done, that they are thrown out by the common cloaca.

" Fel bubulum ſeu taurinum præſtat fere omnium quadrupedum fellibus: " ſpecifice aurium medetur ſuſurro, ulceri ac dolori, (mixtum cum lacte mu- " liebri, aut caprino & cum cottone impoſitum), alvum movet (in clyſteribus). " . . Tinctura fellis tauri. ℞ Fella taurorum, ſenſim in ſole exiccata, cum " ſp. vini extrahe. Coſmeticum eſt inſigne ad miraculum uſque albedinem " gratiſſimum concilians. Illinitur, relinquiturque illita per triduum, quatri- " duumve, ita tamen, ne aëri libero ſeſe exponant, poſt eluatur aliquoties, " aqua florum fabarum, nenuphar, poligonati, & ſimul. *Hartm. in Croll.*" *Schrod.* 794.

ICHTHYOCOLLA.

SECT. I.

Ichthyocolla, *offic.* Iſinglaſs—is a glue made of ſome parts of a large fiſh, dried into thin ſkins like parchment, and rolled up into wreaths of different figures and ſizes, of a white colour, ſomewhat tranſparent, and of a viſcous inſipid taſte, and no ſmell. It comes from Muſcovy. The fiſh of which it is made is either,

1. Ichthyocolla, *offic. Dale* 373. Ichthyocolla, *Geſn. de Aquat.* 50. *Aldrov. de Piſc.* 567. *Bellon. de Aquat.* p. 104. *Rondel. de piſc.* ii. 177. *Raii Ichth.* 244. *Syn. Piſ.* 114. *Ionſt. H. Piſc.* 100. The Iſinglaſs Fiſh—Or,

2. Huſo, *Ph. Edinb.* 24. Huſo Icthyocolla, *Schrod.* 853. Huſo, *Ionſ. H. piſc.* 77. Huſo Germanorum, *Geſn. de Aquat.* 59. *Aldrov. Piſc. R. Syn. piſc.* 113. Huſo, *Charlet. piſc.* 34. The Hauſen, or Lax, or perhaps both. I doubt not but it might be made of not a few other fiſh alſo.

According to ſome it is made of the whole fiſh cut in pieces and decocted into a gelly; but according to others, of the fins, tail, ſkin, and entrails, (why not and head too, which is more probable, if the body of the fiſh be good to eat). It lives in the Danube and Volga, and, as ſome ſay, perhaps, in the Ruſſian ſeas, if it be brought from Archangel, as is generally believed. Vide *Sav. Dict.* i. 806.

SECT. II.

It is an antacrid, lubricating, and incraſſating animal mucilage, agreeing much with gum tragacantha; and commended in fluxes and hæmorrhages, in heat of urine, &c. but is little uſed.

" Siccat,

" Siccat, explet, quadantenus mollit. Hinc uſus ejus in emplaſtris glutinantibus. *N.* adhibetur & ad gelanda jura; ex iiſdem, addito ſaccharo cando, excoquitur etiam tranſlucidum & flavum glutinum genus, quod in ore liquefactum, ad chartas glutinandas adhibetur." *Schrod.* 853.

" Tanquam temperans & anod. ſumitur, in ſpecie in dyſenteria, diarrhœa temperanda & incraſſanda lympha acri; in febribus ardentibus & malignis; in catarrhis ſalſis, inflammatione faucium & tuſſi." *Herm. Cyn.* ii. 58.

It has no acrimony, is very viſcid, and keeps long though an animal ſubſtance. I have it more than thirty years old, yet no ways ſpoiled. " For fining wines, they beat up ſ. q. of it with wine, and throw it into the caſk; where it firſt forms a ſkin or fine network on the ſurface, and then precipitates to the bottom, carrying along with it all the groſſer parts of the liquor: ſo that the filtre may, in this caſe, be ſaid to paſs though the liquor, and not the liquor through the filtre." *Douglas's Geoff.* p. 383. A notable diſcovery!

LAPIS BEZOAR.

SECT. I.

1. Bezoar, Bezoar orientalis, Lapis Bezoar, *off.* Lapis Bezar. *Garz. Cluſ. Exot.* 216. *Acoſtæ lb.* 279. L. Bezaar, *Monar. Cluſ. Ex.* 8. L. Bezahar, Perſis Pazahar, *Bont. in Garz.* fol. 9. b. L. Bezoar Orientalis, *Worm. Muſ.* 110. L. Bezoar Orientalis verus & pretioſus, *Kæmpfer. Amæn. Exot.* p. 398. Oriental Bezoar.—This is a ſmooth, ſhining, tunicated, ſtony concretion, formed in one of the ſtomachs of a kind of wild goat, of different colours, ſizes, and figures, with ſome heterogeneous ſubſtance for a nucleus, without taſte or ſmell. The animal that breeds it is the

Capra ſive Gazella bezoardica orientalis *offic. Dale* 402. Caper ſive Hircus bezoarticus, *Aldr. Quad. biſulc.* 755. Capra ſive Hircus bezoarticus, vel potius pazaharticus, *Ionſ. Quad.* 56. Hircus bezoarticus, *Charl. Exerc.* 11. Capri-Cerva orientalis, è qua Lapis Bezoar orientalis, *Schrod.* 801. Fera quædam montana Caprini generis, quam Perſæ Paſen, noſtrates Capricervam nominant, *Kæmpf. Amæn.* 398. Gazella Indica, cornibus rectis, longiſſimis, nigris, prope caput tantum annulatis, *R. Syn. Quad.* p. 79. The Bezoar Goat;—which is found in Perſia, Golconda, and ſeveral other parts of the Eaſt-Indies.

That there are ſuch concretions in animals cannot be denied; and that the true Bezoar is a morbid one is certain from the accounts *Bontius*, *Kæmpfer*, &c. give of it. It is in the old, the lean, the more timorous, male animals that they are moſt commonly found: and the natives are ſaid to know by their gait whether they have the ſtone or not. Beſides, ſome mountains (as mount Baarſi in Perſia, *Kæmpf.*) make theſe goats much more ſubject to this diſeaſe than others. But theſe ſtones are ſo much valued in Perſia and the Indies, that there is too good reaſon to believe that none of them come to the ſhops in Europe.

" Pretio lapides hic conſtant admodum caro, ſiquidem ſelectiori forma & colore gaudeant. Ex his, qui 3j. pondus obtinent, a gemmariis Tumano, five quindecim uncialibus (15 crowns) veneunt. Quod vero pretium, ex-

" emplo unionum, diſpari aſſurgit proportione ponderis, ita ut omnem ali-
" quando æſtimationem exſuperet. Ex lapidis raritate & prætio facile colli-
" gimus, Bezoarticos, quibus in pharmacopœis Europæis utimur, non eſſe
" Perſicos, vel ex eorum numero, qui, a Capris bezoarticis, Paſen nomen
" ſortiuntur; ſed vel ex aliis animalibus, vel ſub alio cœlo degentibus de-
" promptos & ſuppoſitos." *Kæmpf. Amœn.* 403; where he mentions ſeveral ſpurious ſorts.

Many marks of the true Bezoar are given by authors; but unluckily they do not agree among themſelves. *Dale* refers to *Schroder* for them; though all the nine notæ bonitatis in *Schroder* are condemned by *Kæmpfer* except the fifth, which is this. " Si lapis humectatus, & calci vel muro affrictus, calcem
" colore viridi tingat: ſi lapis calce viva, cui admiſta aqua, inunctus, paulo
" poſt flaveſcat: ſi lapis chartæ Creta oblitæ affrictus viridem inducat lineam:
" ſi pulvis cum calce viva mixtus, colorem ex pallido virentem referat, (quod
" tamen non de omnibus verum eſſe poteſt)." *Schrod.* p. 801. " Such ſtones
" as are ſmootheſt, ſmall, and ſtrike a deep green upon white paper that has
" been rubbed over firſt with chalk, which is a ſure way of trying them, are
" to be preferred." *Quinc. Ph.* 163. " Notam legitimi lapidis profitentur, ſi
" volæ manus cinere aſperſæ, vel Creta oblitæ affrictus, lineam inducat lu-
" team, vel ex luteo viridantem. Hæc illis Lydius eſt, quo veritatem ſimul
" & bonitatem explorant." *Kæmpf. Amœn.* p. 401. where he ſays alſo, " Pro-
" genuinis habeo eos, qui inter reſinæ & lapidis ſubſtantiam ita ambigunt ut
" contuſi in acido nitri vel ſalis ſpiritu diſſolvantur, ac menſtruum colore ſatis
" rubente, ſimul ac virtute ſua imbuant:" and that as for the colours of them, the moſt eſteemed are " viridantes, cœrulei, vel in alterutrum colorem nigri-
" cantes:" and, p. 392. that the ſtone which his companion took out of the animal " erat policaris longitudinis, figuræ ad aſſem cylindraceæ, nigricans &
" glaberrimus, non amplius ſcrupulum pendens." *Savary, Dict.* i. 327. ſays " It is of no matter what figure the Bezoar be of, neither of what colour,
" but the more common is the olive colour." . . . . " Ex primo circa mate-
" riam contentam ſtamine, efformandi lapidis figura pendet." *Kæmpf. Amœn.* 401.

Now the chief criterion of the Bezoar being the colour it gives to abſorbent earths, there is little doubt but that it may be eaſily counterfeited, as the low price of it ſhews it is. The following marks of its being genuine deſerve notice: " Probatur Bezoar, ſi fricando imprimat ceruſſæ chartæ impoſitæ
" colorem ex viridi fulvum; deinde ſi acus candens eum non penetret: ſi ejus
" pulvis odore accedat ad ambram griſeam; ſi aquæ tepidæ per noctem im-
" miſſus, ejus limpiditatem non mutaverit nec ipſe emollitus aut pondere auctus
" fuerit." *Nucl. Belg.* 159.

2. Lapis Bezoar occidentalis, *off.* The occidental Bezoar:—which is commonly larger than the oriental, conſiſting of much thicker coats or cruſts, of a coarſer grain, of an aſh colour, ſometimes clouded with a dark brown, of different ſizes and figures, with a nucleus, without taſte or ſmell, found in the ſtomachs of ſome American animals, particularly that which is called

Cervus minor Americanus, Bezoarticus *offic. Dale* 403. Capri Cerva occidentalis, *Schrod.* 802. Cuguacu-ete, *Marcg.* 235. Cuguacu-apara, *Ejuſdem* ſive mas & fœmina, *R. Syn. Quad.* p. 90. " Animal ipſum titulo Capreoli
" marini

" marini Ionſtono depingitur, tab. 33." ait *Raius*, l. c. " Animal mas a " Piſone (edit. 1658.) p. 98. bene depingitur." *Dale*, l. c. Mazama *ſeu* Cervus, *Hernand.* 324. The leſſer American Deer, or Bezoar Deer of Peru.

" This Bezoar is made up of ſeveral laminæ, or cruſts like the former, but " thicker much, and being broke appears as if it had been ſublimed, in that " one ſees in it a great many little needles ſhooting like thoſe of ſalt of lead. " The outſide is very ſmooth, and of a reddiſh-grey colour." *Pomet. Edit.* 1748. p. 12. " Nuperrime mihi ex Carolina auſtrali tranſmiſſus eſt a pronepote meo " Lapis Bezoar, qui in Cervi ſupracitati ventriculo inventus eſt, magnitudinis " ovi columbini; accrevit 4. diſtinctis laminis, fuſci coloris, nucleo magnæ " glandis Americanæ, & omnes nuclei iſtius impreſſiones intus habuit, quod " Lapidem genuinum eſſe, mihi plene perſuaſit," *Dale*, p. 403. Does not its texture give ground to ſuſpect it to be a mineral production?

Bezoar comes from the Perſian name Paſahr, *Kæmpf. Amæn.* 398. The Perſians call it Pa-zahar, Pa ſignifying *contra*, and Zahar *venenum*, *Bont. in Garz.* f. 10. *Bochart* derives it from the Perſian word Bed, *remedium*, and Zahar, *venenum. Charlet. Exerc.* 1. " Philoſophi nomen petunt ab Hebræo Bahaſ, " quod *dominium*, & Perſico Sahr, quod *venenum* ſignificat, & Lapidem veneni " domitorem vocant. Sed hæc ficta derivatio." *Kæmpf. Amæn.* 398.

Bezoar was introduced into phyſic by the Arabians; and perhaps by *Razis*, who died in 932. æt. 80. at leaſt in his *Continens*, he deſcribes it, and extols its virtues, preferring it even to the theriaca; as quoted by *Matth.* p. 940, *Monard. de Lap. Bezoar.* and *Cluſ. Exot.* p. 10. where, p. 9. Serapio (qui flor. circa 890.) Avicenna (qui obiit 1036.) Avenzoar (qui flor. circa 1100.) and many other Arabians are quoted. This *Dr. Friend* did not obſerve, when he wrote that Avenzoar's ordering Bezoar in the jaundice was the firſt time he found it uſed by way of medicine, or any hiſtory of it deſcribed. vid. *Hiſt.* ii. 106.

As for the Occidental Bezoar, *Nic. Monardes Hiſpalenſis* is the firſt who mentions it, in his *Hiſt. Sim. N. orbis*, printed in Spaniſh in 1571 and 1580, and in Latin by *Cluſius* (in ejus Exoticis, where, p. 327, it is called Lapis Bezoar Peruanus). To which he adds a deſcription of three he had from *Sir Francis Drake*; as alſo of ſome others, with the figures of three large ones.

SECT. II.

The Oriental Bezoar is called cordial, nervine, ſudorific, alexipharmic, &c. and commended in the vertigo, melancholy, palpitatio cordis, ſyncope, jaundice, colic, ſtone, dyſentery, obſtructis menſibus, partu difficili; but for poiſons, malignant fevers, peſtilence, in an eſpecial manner. It may be called good for every diſeaſe, where either the phyſician needs to do nothing, or knows not what to do. The oriental and occidental Bezoars, were it not for the colour, might be uſed indifferently.

" Lapis Bezoar *orientalis* corroborat, ſudores ciet, alexipharmacus eſt, ideo- " que utilis in vertigine, epilepſia, lipothymia, palpit. cordis, ictero, colica, " dyſenteria, vermicatione, calculo, menſibus obſtructis, partu difficili, me- " lancholia; præcipuè autem in peſte, febribus malignis, venenis aſſumptis.

" Quia

" Quin & extrinſecus adhiberi poterit in ſcrophulis apertis, cancro ulcerato, " & ſimil. Doſis a gr. iij. ad xij." *Schrod.* p. 802.

" Lapis Bezoar *occidentalis*, iiſdem viribus celebris eſt cum orientali, cujus " tamen bonitati non parum cedit. Hinc utilis compertus eſt, in affectibus " cordis, venenis, febribus peſtilentialibus, quartana, (cujus ſymptomata mi- " tigat), melancholia, morbis diuturnis, lumbricis, epilepſia, & ſimilibus. " Nec minus & extrinſecus convenit in vulneribus venenatis (inſperſus). Do- " ſis a gr. vj. ad xx. *N.* peculiare habet, quod alvum quoque nonnihil mo- " veat (Monard)," *Schrod.* p. 802. *Monardes* concludes his account of it " thus: " Breviter hoc lapide uti ſolemus in omnibus diuturnis & difficilibus " morbis, in quibus medicamenta vulgaria nihil profuere, eoque magna cum " utilitate, aut ſaltem ſine noxa." *Cluſ. Exot.* p. 328.

1. The Bezoars have neither taſte nor ſmell, are indiſſoluble in, and hurtful to, the animals that breed them, and do not abſorb vegetable acids, or the ſp. vitrioli. " Neither the weſtern nor eaſtern Bezoar ſtir at all with ol. vi- " trioli. The weſtern Bezoar with ſp. nitri makes a very little thin froth, " and that's all, and that it doth very ſlowly: but oriental Bezoar with ſpirit " of nitre, after ſome time, maketh a very great efferveſcence, froth, eleva- " tion, noiſe and ſteams (as if you poured ol. vitrioli upon ſal tartari) till it " be wholly diſſolved, and turned to almoſt a blood red." Thus *Grew on Mixtures* (in *An. Pl.*) p. 237. " Spiritus nitri rectif. ʒj. ſoon diſſolves intirely " ocul. cancrorum ʒiv. gr. ix; but only Bezoar orient. ʒiß. and very ſlowly " too; and of Bez. occident. ʒj. gr. lx, and ſooner than the oriental: ſpiritus " ſalis ʒj. diſſolves ocul. cancr. ʒiij; Bez. orient. gr. xlvi; Bez. occident. gr. li. " and both very ſlowly." *Homberg. Mem. Acad.* 1700. p. 81. But, according to *Dr. Fred. Slare*'s Experiments, neither verjuice, vinegar, oil of vitriol, ſtrong or diluted, ſpirit of ſalt, nor ſpirit of nitre, had any effect on the oriental Bezoar. See his *Obſervations on Bezoar ſtones* (edit. *Lond.* 1715.) p. 1, &c. It conſiſts but of forty-ſeven pages; yet in it he has enough, both from obſervations and teſtimonies, to prove it uſeleſs, and alſo factitious. Beſides, the different events of the experiments made by theſe three candid authors ſtrongly confirm that Bezoar is not a genuine animal concretion, but factitious, of different kinds, ſo that we know not what it is — 2. Mr. Leuwenhoek ſays Bezoar by calcination loſes two thirds of its weight: that its chemical oil coagulates the blood; but its ſpirit dilutes the blood, and ſeparates the red globules into the conſtituent ſmaller ones: which an infuſion of it in water did as well. Vide *Bib. Pharm.* i. 416. That is, water does as well as any of them. For if it loſe of its weight in water, " falſum ac adulterinum eſſe lapidem " audacter dicito," ſays *Bontius in Garz.* fol. 10. a. — 3. Its virtues are not confirmed by any experiment, yea, ſo far as I can find, ſuch as have been made with the ſtone itſelf have proved it rather uſeleſs. *Amb. Parè* (in his works, *edit. Paris* 1585, l. 21. c. 44. p. 800.) writes, That a perſon of quality having preſented the king of France with a Bezoar ſtone brought from Spain, which he aſſerted was a certain antidote againſt all ſorts of poiſons; *Parè* was called, who, after reaſoning whether there could be ſuch an univerſal antidote, adviſed to make the experiment on a criminal. Accordingly one condemned to be hanged next day willingly conſented the experiment ſhould be made on him, took poiſon, and after it the Bezoar. Nevertheleſs, and although

though he drank plenty of water, and a demiſextier (℥viij.) of oil, after violent torture, he died moſt miſerably in about ſeven hours after, ſaying he had much better have ended his days on the gibbet. On which the king ordered the Bezoar Stone to be thrown in the fire. The poiſon was corroſive ſublimate: though *Kæmpfer*, in order to ſave the honour of the ſtone, ſays it was arſenic. "Non enim omnes Bezoartici Lapides æque ſunt virtuoſi, ac alexipharmaci; "& qui ſunt, facultatem non tam adverſus venenum minerale, quam animale "& vegetabile exſerunt, quale miſero non fuerat propinatum." *Amæn.* p. 402. But how can we know the moſt efficacious but by trial? And many ſuch have been made even in natural diſeaſes with as little ſucceſs. Vide *Bont. in Garz.* fol. 10. a & b. *Caſp. Hoffman.* p. 525. and *Slare*'s *Obſervations*, where among others it is obſerved, that the late queen Mary took Bez. ʒß. in the ſmall-pox without any relief, for ſhe died in the time of the eruption. "I am "informed by a friend to the grandee of the faculty, that he has got above "50000l. by preſcribing Gaſcoin powder, though I am perſuaded that, if you "aſked him what are the ingredients it contains, he would not be able to tell." *Slare*, p. 21.

"Quantum ad hyperbolicas hujus lapidis virtutes, ac facultates portento-"ſas, non tantas in eo, mille experientiis edoctus inveni. . . Quoque id magis "credatis, lapides hi, miſeris hircis ac capris tam moleſti ſunt, quam homi-"nibus lapides veſicæ ac renum." *Bontius*, l. c. And in the following page he prefers the Calculus humanus to them, and even to the Lapis porcinus alſo.

"Sunt mihi ſuſpecta quæcunque de iſto lapide Stentorea voce prædicantur a "pharmacopœis. . . D. Saxonia, præceptor meus, aliquando publice dicebat, "ſe initio praxeos ſuæ uſurpaſſe quidem; verum poſtea didiciſſe, Bezoar, ex-"tra omnem adulterii ſuſpicionem, quippe quem nobiles Veneti ipſi, manibus "ſuis exemerint e ventriculo animalis ſui, nihil feciſſe. Hæc ratio fuit hacte-"nus mihi, qui nunquam uſurparim, nec poſtea uti velle animus ſit. Sunt etiam "nonnulli quidem impoſtores, qui perfricta fronte audent mira polliceri de ejus "facultatibus ad promovendam variolarum expulſionem, & ut Arabice lo-"quuntur, ad roborandum cor, adverſus tantam malignitatem: ſed quæcun-"que male feriati iſti effutiunt, mera ſunt ægrorum ſomnia, & pura puta "mendacia: neque enim plus poteſt iſte lapis, in talium morborum curatione, "quam calx aut cinis." *Hoffm.* p. 525.

But phyſicians are ſometimes obliged to preſcribe ſomething, when they ought not: in ſuch caſes one may ſolemnly trifle, and order Bezoar, gr. j. ij. iij. &c. provided the patient's purſe can well bear to pay for gratifying the (fancy or) imagination; for the price is the only objection againſt ʒß or ʒj. "Datur a ℈j. ad ʒj. niſi pretium obſtaret." *Herman. Cyn.* ii. 34.

LAP. CANCRORUM.

SECT. I.

Oculi Cancrorum, *offic.* Crab's Eyes—are white hard ſtony ſubſtances, about the bigneſs of peas, but of different ſizes, ſome ſcarce weighing one

grain, others ten or twelve, round and convex on one ſide, and a little hollow on the other, without taſte or ſmell, ſaid to be found in the

Aſtacus fluviatilis *offic. Dale* 367. Aſtacus fluviatilis. *Geſn. Aquat.* 104. *Aldrov. de Aquat. Exang.* 129. *Ionſ. Exang.* 15. *Charlet. Exer.* 56. *Merr. pin.* 192. *Cammarus. Bellon. de Piſc.* 355. Cancer, *Schrod.* 849. The Crey-fiſh, Craſiſh, or Crevice.

Theſe ſtones are found in the ſtomach of this animal (they ſay alſo in crabs, and lobſters) before it caſts its ſhell in June or July, when it renews alſo its ſtomach, one on each ſide. The new ſtomach, which is formed without the old, by degrees firſt digeſting the old ſtomach, and then the Lapides, reſerves no other nouriſhment for many days (27 circiter, ſecundum *Helmont*) A wonderful but neceſſary renovation! Vide *Helmont De Lithiaſi*, c. 7. § 31 and 32. p. 53. *Geoffroy*, *Mem. Acad.* 1709. p. 19. *Mr. Reaumur*, *Mem. Acad.* 1718. p. 333.—They are brought to us commonly from Muſcovy or Holland.

" Iſtorum ſæpe occurrit genus factitium ex cimolia alba in illam formam " confectum, quod pro illis venditur, ſed fraus iſtum frangendo, detegi po- " teſt, namque veri Cancrorum Oculi laminati ſunt in parte gibboſa, quâ " factitii carent." *Dale* 367. Vide *Charas*, *Phar. Roy.* p. 797. See alſo a late account of them by *Dr. James Mounſey*, *Phil. Tranſ.* N°. 486. p. 176. " Theſe concretions (ſays he) called Crabs-eyes are found in Cray-fiſh, two " in each, one on either ſide of the anterior and inferior part of the ſtomach, " generated about a point lying between the coats thereof. The flat or con- " cave ſide lies next the internal coat, which is very thin and clear, though " ſtrong and horny; and the convex is covered by the fleſhy and ſofter coats " of the ſtomach, whoſe fibres make impreſſions on its ſurface. It grows by " degrees lamellatim, and is ſupplied with juices through ſudamina opening " on the internal ſurface of the outer coat; the inner gives reſiſtance only, " hence concave on one ſide; and the firſt remarkable ſcale (whereon all the " others are formed) may be perceived in the centre, the brims or circum- " ference of many of the reſt being very apparent. At the time theſe ſtones " are not to be found in the animal, there are little circular ſpots, ſomewhat " opake, and whiter than the reſt of the ſtomach, to be perceived in their " place; nearly oppoſite to which are tenacious mucilaginous ſubſtances, " formed like little placentulæ, and called by ſome the glands of the brain: " theſe are larger and more perceptible when the ſtones are wanting, but ne- " ver become ſtones. They do not caſt their ſtones with their ſhells, which " they ſhed every ſpring; but a little before or after their caſting their ſhells, " the ſtones break through the internal coat of the ſtomach, and, being broken " by its three ſerrated teeth, are diſſolved in a few days. . . They eat the old " ſhells immediately after ſhedding them. There are fiſhers for Cray-fiſh on " account of the ſtones only. . . The price comes to a groat or ſixpence a " pound. Great quantities come from Aſtracan, where are got the largeſt." —Dr. *J. M.* is one of the phyſicians to the *Czarina*'s armies.

SECT. II.

They are abſorbent like chalk; called diuretic, ſudorific, alexipharmic; and commended in the ſtone, colics, cardialgias, all ſorts of fevers, &c. They may be given to ʒj. " Re-

" Refrigerant, ſiccant, abſtergunt, calculum atterunt, tartarum & ſangui-
" nem coagulatum reſolvunt. Hinc uſus magni in nephritide, pleuritide,
" aſthmate, dolore colico, &c. ſive crudi tritique aſſumantur, ſive uſti, & præ-
" parati; inſerviunt itidem dentibus abſtergendis." *Schrod.* 850.

They diſſolve in and ſweeten acids very ſoon. Vid. *Mr. Homberg*, *Mem. Acad.* 1700. p. 81. *Charas*, *l. c.* ſays they yield a volatile ſalt, and empyreumatic oil, like other animal ſubſtances. They are prepared by levigation. If genuine, are they any better than their teſta or putamina? Calcined they become calx viva, and have then a better claim to a diuretic virtue than when only prepared *l. c.*

Many ſuſpect that they are for the moſt part factitious, made up of teſtaceous powders, &c. I infuſed Lapidum ʒij. (No. 32.) in aq. bullientis ℥vj: after ſome days maceration the water was a little wheyiſh, and ſomewhat aromatiſed; and the ſtones, when dried, had loſt of their weight only gr. ij. but were as hard as ever. Infuſed twenty days in alcohol vini their weight was nothing diminiſhed, nor was any change made in their colour or conſiſtence. After calcination in a crucible for two hours they weighed about ʒiv. were very friable, many black within and finely lamellate (ſo that I could number nine or ten lamellæ with glaſſes); and though they did not heat water, or fall to lime in it, not being thoroughly calcined, yet they made it good lime-water. Hence they appeared to be genuine.

LAPIS MANATI.

SECT. I.

Lapis Manati *ſeu* Os Manati *offic.* The Sea-Cow Stones.—Theſe are of the colour and conſiſtence of ivory, of an irregular figure, of different ſizes, and without taſte or ſmell, formed in the head of the large amphibious animal called

Manati *offic. Dale* 406. Manati Indorum, *Ald. de Piſc.* 728. *Ionſ. Piſc.* 157. Manati, Phocæ genus, *Cluſ. Exot.* 133. Manati, *Belgis.* Vacca Marina, *Charlet. Piſ.* 49. Manati *ſeu* Vacca Marina, *R. Syn. Quad.* 193. *Sloan. Hiſt. Jam.* ii. 329. The Sea-Cow.

It is found in the American ocean, about Hiſpaniola, &c. has two feet like hands (whence called by the Spaniards Manati). N. B. " Hiſpani omnium
" quadrupedum anteriores pedes, manus appellant." *Cluſ. Exot.* p. 134: where are ſeveral wonderful things related concerning this biped. Some ſay it has two ſtones in its head; others ſay four; others, that theſe ſtones are the oſſa petroſa. It has a head ſomewhat like a cow, and feeds a-ſhore on herbs. It is viviparous, the females ſuckling their two calves with their two dugs. " Hic piſcis lutræ prope formam referens, 35 pedes longus, 12 craſſus eſt,
" capite & cauda bovem referens, exiguis oculis, pelle dura & piloſa coloris
" Veneti; pedes duos elephantinis ſimiles habet. Fœminæ ejus generis ut
" Vaccæ catulos pariunt, eoſque gemino ubere alunt; ut Hieron. Benzon ſcri-
" bit." *Charl. l. c.*

SECT. II.

They ſeem to be of the ſame nature with the unicorn; but are chiefly commended for the colic and gravel. They are prepared by calcination and levigation, and given to ʒj.

" Lapis præparatus fit ex calcinato, ſeu cremato. *Vires.* Summe commendatur ad calculos renum & veſicæ comminuendos, dolores nephriticos ac colicos ſanandos. Doſis ʒj. & ultra. *N.* Sunt qui ad ʒj. aſcendunt." *Schrod.* p. 851. *Pomet* & *Lemery* ſay they are emetic, and the laſt gives them only to gr. xij. *Alb.* in *MS.* obſerves that they are reckoned antiſpaſmodic. I can ſay nothing of them, as I never heard of their being uſed.

LAPIS SERPENTIS.

SECT. I.

The Serpent's Stone is a hard porous flat oval ſubſtance, about the bigneſs of the thumb nail, thicker in the middle than about the ſides, pretty ſmooth, of different colours, and very bibulous, brought from the Eaſt-Indies. Many think it altogether factitious, and made by the Bramines (vide *Tavernier*, *Harris*'s *Collect.* ii. 375); others that it is a natural ſtone found in the head of the Serpens Indicus *offic. Dale* 395. Serpentis genus coronatum *ſeu* diademate inſignitum (Luſitani Cobras de Capelo, nos Regulum dicere poſſumus) maximè noxium, *Garziæ Cluſ. Exot.* 214. Serpens Indicus coronatus, diademate ſeu conſpicillo inſignitus, Luſitanis Cobras de Capello dictus, *Garz. Naia*, *Zeylan. R. Syn. Quad.* 330. The Indian hooded or crowned Serpent, common in Ceylon, Malabar, &c. Of this opinion was *Kircher*, *Thevenot*, *Mr. Boyle*, &c. vide *Dale* 395; who thinks there is both a native or genuine Serpent's Stone, and alſo a factitious one.

SECT. II.

It is called alexipharmic, inwardly taken; and is ſaid to cure venomous bites, applied to the wound outwardly, by ſucking out the poiſon.

You have enough of its virtues in *Dale*; as alſo experiments wherein it ſucceeded, externally applied; and wherein it failed; with his way of accounting for both. For my part I am entirely of *Dr. Mead*'s opinion, " That " theſe ſtones, by reaſon of their ſpongy and porous texture, may readily adhere to any moiſtened part, as they do to the tongue, and imbibe whatſoever humidity they meet with; and thus may draw out ſome part of the poiſon;" (and perhaps ſometimes the whole): vide *Mead on poiſons*, *Edit.* 1702. p. 27. and *Edit.* iii. 1745. p. 44; in the laſt of which the paſſage is much contracted; thus, " They will indeed, when applied, ſtick to the wound " for ſome time, being, as appears from their make, not natural but factitious " bodies, compounded moſt probably of calcined bones and ſome teſtaceous ſub-

" ſubſtances mixt together: but when they drop off are found to have im-
" bibed nothing of the venom." I ſcraped a little of one of theſe ſtones into ſp. vitrioli, but could obſerve no ebullition or ſolution for two days; though ſome time after it was diſſolved. It is made an *Os calcinatum* in the *Paris Diſpenſatory*.

MANDIBULA LUCII.

SECT. I.

Lucius *offic. Dale* 373. Lucius, *Geſn. de Aquat.* 500. *Aldrov. de Piſc.* 630. *Ionſt. de Piſc.* 109. *Charlet. Piſc.* 42. *Merr. Pinax.* 190. *R. Syn. Piſc.* 112. The Pike, or Pickerel.

This is a very voracious fiſh, and common in our rivers and lakes. " Vadis
" petunt cum parturiunt; ac ſæpenumero ſingulas fœminas mares 12, 13,
" aut 14 ſequuntur." *Charlet. l. c.*

" *Officin. Nat.* Fel, cor, mandibula, officulum cruciforme, axungia, ova." *Schrod.* 854. " *Uſu.* Mandibula, ſeu inferior maxilla, & axungia." *Dale* 373. The Mandibula is retained in our Pharmacopœia.

SECT. II.

It is perhaps ſomewhat abſorbent, if powdered; though, when whole, ſp. aceti makes very little impreſſion on it in eight or ten days: but it is no better than other fiſh bones. It is however commended in the pleuriſy, ſtone, fluor albus, difficult labour, &c.

" Mandibula exiccat, abſtergit. Hinc datur in pleuritide, ceu ſpecificum,
" confert itidem, ut & reliqua capitis officula, in calculo, fluore albo, mu-
" lierum partu difficili. Extrinſecus ſiſtit (cinis) ſynoviam, vulnera inveterata
" mundificat, hæmorrhoides exiccat." *Schrod.* p. 850: Quem *vide* pro reliquis. *Credat qui vult.*

MARGARITÆ.

SECT. I.

Margaritæ, Perlæ, Uniones *offic.* Pearls.—Theſe are hard ſhining concretions, of different colours, figures, and ſizes, without taſte or ſmell, found in ſeveral bivalve ſhell-fiſh, eſpecially in the

Mater Perlarum *offic. Dale* 366. Concha Margaritifera *Aldrov. Exang.* 418. *Ionſt. Exang. Aquat.* 41. *Charlet. Piſc.* 64. Concha Margaritifera, pleriſque; Berberis antiquis Indis dicta, *Liſt. H. Conch.* 3. No. 56. Concha, mater unionum dicta, aut Margaritifera, *Bonan.* 93. 11. n. 1. The Pearl-Oiſter, or Mother-of-Pearl, generally found in the Mediterranean ſea, &c.

Pearls are found alſo in oiſters, muſcles, nacre fiſh, &c. and are ſo far from being " e rore cœleſti genitæ," (vide *Plin.* l. 9. c. 35. p. 221. l. 39.) that they are the diſeaſe of the fiſh that breeds them, formed of the ſame ſubſtance

with the ſhell (vide *Mr. Reaumur*'s obſervations on the Pinna marina, *Mem. Acad.* 1717. p. 227); and are juſt ſuch concretions as the bezoars and calculi are in other animals. The finer the ſhell is, the finer alſo is the Pearl as to its water, or colour and luſtre. The ſame ſpecies of fiſh is more ſubject to this ſtone in ſome ſeas and ſome rivers than in others; the old more than the young: and while ſome of the ſame ſpecies, in the ſame ſea or river, have no Pearls in them, others will have two or more; yea ſometimes ſo many as to hinder the ſhutting of the ſhell, and ſo choak the fiſh.

Pearls are tunicated, or compoſed of lamellæ incloſing one another: and though they are beautifully imitated, yet they cannot be counterfeited ſo as to deceive the moſt common obſerver. They are numbered among gems; and valued according to their water, figure, and magnitude. In 1633 the king of Perſia paid an Arab for a pearl 2000 tomans=1472800 livres, then equal to 109096 pounds ſterling. For an account of the value of pearls, the moſt famous pearl-fiſheries, and whatever concerns them, as a branch of commerce, ſee *Sav. Dict.* ii. 1049—1054. For medicinal uſe I think them all alike, and no better than the ſhell that breeds them. The Mother-of-Pearl ſhell is ſometimes vaſtly larger than any Oiſter-ſhell. "Hæc interdum tam grandis in "India invenitur, ut ferant in mari Borneo inventam pondo ſeptem & qua-"draginta librarum." *Charlet. Piſc.* 64.

SECT. II.

They are abſorbent, like crabs-eyes; and uſed the ſame way: are called cordial and alexipharmic; and commended for low ſpirits, melancholy, conſumption, peſtilence. The doſe is to ʒß. or ʒj. if not too dear. They require accurate levigation: all other preparations are uſeleſs.

N. B. "Cordiale præbent nobiliſſimum, quo balſamus vitæ oppreſſus, vireſ-"que exolutæ, inſigniter recreantur, ac confortantur; proinde venenis, peſti, "& putredini reſiſtunt, animum exhilarant. Et hujus rei gratia, in tantum "aſcenderunt honorem, ut vel agoniſantium extrema recreatio communiter "inde expetatur." *Schrod.* p. 348 ad 351. where you have plenty of præparata: of which I ſay the ſame as of the præparata è coralio.

LECTURE LXXXII.

MOSCHUS.

SECT. I.

MOSCHUS *offic.* Muſk—is a grumous unctuous ſubſtance, not unlike clotted blood; of a blackiſh colour, warm bitteriſh taſte, and very fragrant ſweet ſmell, at a diſtance, or in a very ſmall quantity, otherwiſe rank and fetid, found in a bag ſituated between the umbilicus and pudenda of the animal called

Animal

Animal moſchiferum *offic. Dale* 404. Capreolus Moſchi, *Geſn. Quad.* 695. *Grew's Rarit. R. S.* p. 21. Capra Moſchus, *Aldrov. Quad. biſulc.* 743. *Ionſt. Quad.* 55. Capra Moſchi, aliis Cervus odoratus, *Charlet. Exer.* 10. "Animal moſchiferum neque e caprino, neque e cervino genere eſſe videtur; "cornua enim non habet, & an ruminet incertum; dentibus tamen inciſoriis in ſuperiore mandibula caret, ruminantium in modum; at dentes ibidem exſertos (*tuſks*) habet velut porcus." *R. Syn. Quad.* 127.

It is a native of Tartary, China, and ſeveral countries of the Eaſt Indies. It is deſcribed by *Dr. Grew*, l. c. and from him in *R. Syn. Quad.* who, *l. c.* ſays, "The Muſk bladder or bag is about three inches long, two over, and "ſwelling out from his belly one and a half, ſtanding before his groin about "as much." Vide alſo *Lucæ Schrockii Hiſtoriam Moſchi, Auguſtæ Vindel.* 1682. in 8vo. or *Bib. Ph.* ii. p. 343—423. But this ſeems not to be the only Muſk animal: for

There is an anatomical deſcription of a Muſk animal by *Mr. Peyronnie, Mem. Acad.* 1731. p. 624 ad 652. which differs (as he obſerves) from the Gazella of Scrockius; from the Muſk-rat of Canada, deſcribed *Mem. Acad.* 1725. and comes nearer to a kind of Pole-cat (fouine) called Genette; but differs from the two Civet animals deſcribed by *Mr. Perrault.* Its ſack was ſituated between the anus and pudenda; and could contain about half an ounce of muſk. Vide *locum.*

Muſk is a valuable commodity, and very liable to adulteration, and that ſeveral ways, a ſmall quantity of it giving a very ſtrong ſmell to a great deal of other ſtuff mixed with it; but ſuch as have ſmelled genuine Muſk will not be much deceived in examining what is mixed. Vide *R. Syn. Quad.* l. c. and for what concerns trading in Muſk, *Sav. Dict.* ii. 837. "If a ſmall quantity "of good Muſk be infuſed in ſp. vini cold for a few days, it imparts to the "menſtruum a deep coloured but not red tinge: this tincture is of a faint "and no very pleaſing odour, almoſt as if there was no Muſk in it: never"theleſs a ſingle drop of it communicates, to a pint or even a quart of ſack, "a rich muſky ſcent. From *Boyle's Eſſay on the Mechanical Production of taſtes and odours.*" *Lewis's Pharm.* 79. This I think the beſt way of examining whether the Muſk is genuine or not. Newman informs us, "that ſp. vini "diſſolves ten parts out of thirty of Muſk, and that water takes up twelve; "that water elevates its ſmell in diſtillation, while pure ſpirit brings over no"thing." *N. Diſp.* p. 162. It is juſt ſuch a ſubſtance, produced the ſame way in, and is of the ſame uſe to, the Muſk animal, that Caſtor and Civet are to the animals that afford them. It is neither the matter of an abſceſs nor corrupted blood, whatever authors may have dreamed concerning it; (vid. *Pomet, Lemery, Dale,* &c.) but a natural liquor, ſecerned by proper glands; and no doubt of uſe to the creature itſelf: and what that is may be in ſome meaſure gueſſed by the ſituation of its ſaccus.

The *Greek* μοσχος ſignifies vitulus, alſo talea; and in *Aëtius*, (the firſt who mentions it as a medicine) *this* perfume.

SECT. II.

Muſk is attenuant, cordial, and diaphoretic; and may be ſaid to comfort the ſpirits, or invigorate all the functions. It is alſo called alexipharmic, cephalic,

cephalic, nervine, and anodyne; and commended for low ſpirits, palpitation of the heart, colic, ſyncope, hyſteric fits, barrenneſs, & ubicunque natura languet; agreeing in virtues with ambergriſe (fere): but for a long time it has not been much uſed, becauſe its ſcent is thought hurtful to vapouriſh perſons.

" Calfacit 2. ſiccat, attenuat, diſcutit, cordialis eſt & alexipharmacus, hinc " & cephalicus. *Uſus præcipui* in omnibus affectionibus cordis, palpitatione " (potus ac illitus). Spiritus nimirum vitales fovet, ſuſcitat, recreat: hinc " in affectionibus capitis ac nervorum, a frigore & craſſis humoribus oriundis, " tum & in dolore colico, &c. Externe detergit tenues oculorum albugines, " & humidas defluxiones exiccat, ad venerem concitat, auditum imminutum " reſtituit, (auribus inditum cum cottone). Doſis gr. iv. v. *Præp.* Species " Diamoſch, dulces, & amaræ. Confectio Moſchardina; & oleum μοσχελαιον." *Schrod.* p. 826.

1. It is ſomewhat bitter and a little warm on the tongue, but exceſſively odoriferous, inſomuch that any quantity of it ſmelled to near is ſtrongly fetid and diſagreeable; but at a diſtance, or a very little of it mixed with other ſubſtances, it is a rich and pleaſant perfume. " Saporis eſt ſubacris, amari- " cantis; odoris fragrantis & grati." *Herm. Cyn.* ii. 39. " Saporis eſt ſub- " acris & ſubamaricantis; odoris fragrantis & grati." *Dale* 404. Subſtantiæ " eſt ſubpinguis, inflammabilis, grumoſæ, coloris caſtanei; ſaporis amarican- " tis & ſubacris; odoris fragrantiſſimi, & quibuſdam inſupportabilis, præci- " pue hyſtericis." *Nucl. Belg.* 199. " It is of a ſtrong and unſupportable " ſmell, and of a bitter taſte." *Pomet*, (*Ed.* 1748.) ii. 15. " It is of a ſtrong " ſmell, and bitter taſte; it is almoſt all ſulphur, or oil, and volatile ſalt; " it contains very little earth; its ſcent is troubleſome and diſagreeable, when " any quantity is ſmelled to; but ſweet and pleaſant when only a few grains " are mixed with a great deal of other ſubſtances." *Lem. Dict.* 361. — 2. It is almoſt incredible how large a quantity of liquids a ſingle grain of Muſk will perfume, and how long it will retain it. A clean cork, which ſtopped a phial in which there was Muſk, which it ſeemed never to have touched, in 1712, ſmelled of Muſk more than twenty years after. How ſubtile muſt its parts be! how volatile! and I had almoſt ſaid how fixed! — 3. " Sanguinem " impetuoſum admodum reddit, & hæmorrhagias narium facile excitat. Novi " ipſe ſubjectum quoddam, quod quotieſcunque Moſcho infecta vel bellaria " vel potulenta aſſumit, hæmorrhagia narium corripitur." *Boecl. in Herm. Cyn.* ii. 41. Hence it ſeems not only agreeably to ſtimulate, or rather tickle, the nerves, but alſo remarkably to rarify the blood. It has long ago been obſerved that, however hurtful the ſmell of perfumes may be to hyſteric people, the uſe of them inwardly has had the contrary effect. And ſure I am, ſince the diſuſe of them, vapouriſh diſeaſes have not been leſs frequent.

But Muſk ſeems to be coming again into vogue. For we have a Julepum è Moſcho in the *Ph. Lond.* 96. And in the *Phil. Tranſ.* No. 474. a p. 213 ad 225. there is an account of ſome very extraordinary effects of it, in convulſive and other obſtinate diſeaſes; and that not only taken by the mouth, but alſo when given in a clyſter. Dr. Wall of Worceſter there ſays, that he knew it ſucceſsful in the rabies, the hiccup, ſubſultus tendinum or catchings in the tendons, ſpaſms and convulſions (in clyſter), pains in the belly (eodem modo), vomiting, inability to ſwallow; alſo that, given to gr. x. and upwards,

wards, it never fails to produce a mild diaphoresis, without heating or giving any uneasiness: that it eases pain, raises the spirits, and, after the sweat breaks out, usually procures a refreshing sleep. He gave it to gr. xvj. He says under gr. vj. he never found much effect from it. See also an account of an extraordinary effect of it, by *Dr. Parsons*, *Phil. Trans.* No. 478. p. 75. for *December* 1745. It was a miserable hiccup, intermitting pulse, delirium, &c. Dosis ad gr. v. *Schrod.* ad gr. ii. *Nucl. Belg.* The dose is from gr.ß to gr. iv. *Lemery.* "Among the Chinese the usual dose is the tenth part of an "ounce," (=48 grains) according to *Dr. Wall*, l. c. from *P. Du Halde.*

MUMIA.

SECT. I.

Mumia *offic.* Mumy—is a hard black shining substance, said to be of a subacrid bitterish resinous taste, and fragrant smell, by *Dale* and *Herm.* It seems to be nothing but a mixture of human or some other blood with some bituminous or resinous substance.

"Mumia communiter quatuor denotat. 1. Mumiam Arabum, quæ est "liquamen, seu liquor concretus, exudans in sepulchro e cadaveribus, aloe, "myrrha, balsamoque conditis. 2. Ægyptiorum, quæ est liquamen ex ca- "daveribus pissasphalt. conditis. Nimirum hoc condiebantur cadavera vilio- "ris sortis, adeoque & ipsamet cadavera nonnunquam eo modo condita pro- "stant. 3. Pissasphaltum factitium, *i. e.* mixtum pici bitumen, quod pro "Mumia venditant. 4. Cadaver sub arena solis æstu torrefactum. Fitque "in Hammoniorum regione, quæ est inter Cyrenarum regionem & Alexan- "driam, ubi arenarum syrtes, ventorum turbine sublatæ, incautos viatores "obruunt; unde horum cadavera, a flagrante solis æstu, torrentur & arescunt. "His, 5. & Mumia recentiorum addi poterit, when, after directing how to "make it of the flesh of some sturdy young malefactor, violenta morte inter- "empti, which he prefers) he adds, utpote in quibus metu sumus soluti, "quem incutit Renodæus, Mumiam officinarum nihil aliud esse perhibens, "quam expressum putridi cadaveris succum inspissatum, ideoque magno mor- "talium damno divendi." *Schrod.* p. 818. Vide *Matth. Epist.* p. 217.

But the genuine, at least most valued, Mumies are the carcases of the embalmed ancient Egyptians, found uncorrupted in their sepulchres, or catacombs, not far from Cairo. Such are rare in Europe, and costly; because they are not only esteemed as curiosities, but also imagined to have wonderful virtues. "It is supposed that all that is sold at Paris is but a factitious Mumy, so to "speak, the workmanship of certain Jews, who, knowing the value put on "the Egyptian Mumies by the Europeans, counterfeit them, by drying ca- "davers in an oven, after having prepared them with myrrh, caballine aloes, "asphalt. pitch, and other common or bad gums. If this is true, it ought "to put the use of so miserable a drug out of conceit." *Sav. Dict.* ii. 760.

Mumia is a corruption of Amomea, from Amomum used of old in the most precious ointments. Vide *Theoph. hist.* l. 9. c. 7. p. 1004. which thence took the same name. Vide supra Amomum, which the Arabians call Hamama, and the Turks Amama. *Bod. in Theoph.* 1014.

5 SECT.

SECT. II.

Mumies are, in my opinion, deteſtable ſtuff, and unworthy of a place in any diſpenſatory: although they are called antiſeptic, ſudorific, alexipharmic; ſaid to diſſolve coagulated blood; and are commended for the vertigo, apoplexy, palſy, epilepſy, convulſive and hyſteric diſorders, contuſions, gangrenes, pleuriſies, &c. "Mumiam nunquam interne exhiberem," ſays *Herman.* The doſe is made ʒj. or ʒij.

"Hominis cadaver integrum, carove, *officinis* Mumiæ titulo venit. Hæc "reſolvit ſanguinem coagulatum (aſſumpta ad ʒij.) conferreque dicitur pur- "gationi capitis, punctioni lienis, tuſſi, inflationi corporis, menſibus ob- "ſtructis, aliiſque affectibus uterinis, & ſimilibus. Extrinſecus adhibetur "vulneribus conſolidandis." *Schrod.* p. 818. In the two following pages you have a variety of præparata. But,

1. Suppoſe the Mumy a part of one of the Egyptian kings, embalmed 3000 years ago, his fleſh is nothing better than a beggar's; and as the ſubſtances then uſed in embalming could not cure the diſeaſe of which he died, (which might be peſtilential for ought we know) and no medicine can be ſuppoſed ſo long to retain its virtues; ſo the antiſeptic virtues of theſe balſams muſt, at leaſt, have been much weakened, if not intirely overcome, by the natural putreſcency of a dead body; and ſo the Mumy long ago turned to a real caput mortuum. — 2. It is not poſſible to know that any of the Mumies, even thoſe brought from Egypt, were embalmed after the ancient Egyptian manner. They may have been dried on the gibbet, or in the ſands; or be Mumies of the Jews making. And though they were, it is not to be imagined that they were all kings or nobles embalmed after the richeſt and moſt ſumptuous manner: it is even much if they are the carcaſes of the poorer ſort, for the preparation of which piſſaſphaltum (with ſalt probably) ſufficed. Hence *Serapio*'s Mumia is *Dioſcorides*'s Piſſaſphaltum: but his "Mumia ſepulchrorum "fit e myrrha, aloe, aliiſque rebus his additis, & humiditate quam exudant "humana corpora." Vide *Matth. Epiſt.* p. 217. and *in Dioſcor.* p. 112. See alſo *Bellonius, Obſ.* l. 2. c. 47. p. 117. and *Thevenot, Harris's Collect.* ii. 425. Can the Piſſaſphaltum, &c. be improved by the ſanies of a corps? But I believe very few now have Francis I. king of France his taſte. "Corporum "in Ægypto conditorum, *i. e.* noſtræ Mumiæ uſus tantus eſt in Gallia, ut "rex Franciſcus, literarum reſtitutor, nuſquam proficiſceretur quin penui ejus "præfecti ſemper, cum rhabarbaro, illud in pyxide deferrent, atque etiam ipſe- "met geſtare ſolitus eſſet." *Bellon. Obſ.* l. 2. c. 47. p. 118. If fables delight you, you have abundance of them in *Pomet*, ii. p. 2—5. eſpecially in the hiſtory of the beetle. Need I add—3. That human fleſh is no better than, if ſo good as, a hog's; nor cannibals ſo wholeſome as that of other people.

SANGUIS HIRCINUS.

SECT. I.

Sanguis Hirci *offic.* is the arterial blood of a Buck-Goat, dried hard, of a blackiſh colour, and ſaltiſh rank taſte. "Hirci mediocris ætatis (quadrimi,

Schrod.), æstate ineunte, emittatur sanguis, apertâ arteriâ idoneâ. Sanguis "vase mundo exceptus, exsiccetur calore solis vel clibani modice calefacti." *Ph. Edinb.* p. 35. See it more circumstantially directed in *Schrod.* p. 799. or *Zwelf. Ph. Aug.* 520.

"Hircum, cujus cruorem in officinis scholæ præscribunt (& passim ovillus "pro hircino venundatur) jubent prius diureticis alendum. . . . Ego vero pro "cruore Hircum suspendo cornibus, & crura posteriora reflecto ad cornua; "testes abscindo, & recepto inde cruore, exsanguem dimitto pro lanione. "Hic cruor autem siccatus est instar vitri, difficillimæque triturationis, atque "longissimè ab hircino sanguine officinarum differens. Assumptus autem ʒj. "pondere, confestim sopit & curat pleuritidem, &c. absque venæsectione: "nec te deseret unquam." *Helmont. Sextupl. Aliment. hum. digestio*, § 74, 75, & 76. p. 213. Vide etiam *Furcus pleura* (*ej. autoris*) § 32. p. 382. where he says, "Sunt mea remedia, quæ neminem in pleuritide & peripneumonia dere-"linquunt; pulvis de virga cervi vel tauri, vel cruor hirci, vel succus cichorei "sylvestris, flores papaveris sylvestris, ac plura talia. Potissimum laudo cru-"orem hirci, non equidem venalem, sed hircum suspendo cornibus, &c." Though this preparation is whimsical, he chooses a properer Latin word for it than sanguis. "Sanguis alit venas, cruor est e corpore fusus." So that he accurately calls it cruor, not sanguis hirci. Hircus is the buck, capra the she-goat, the male (castrated or) gelded is called caper, and a kid hædus: yet caper sometimes denotes the male.

Caper, *offic.* The Goat, *Dale* 401. *Aldrov. Quad.* 619. *Charl. Ex.* 9. Capra & Hircus domestici, *Ionst. Quad.* 46. *Gesn. Quad.* 265. Capra domestica, *R. Syn. Anim. Quad.* p. 77.

SECT. II.

It is alcalescent, and perhaps diaphoretic; is said to dissolve coagulated blood; called alexipharmic; and commended for the angina, pleurisy, gravel, dysentery, &c. The dose is ʒj. But I think it good for nothing, in this quantity at least.

"Sanguis hircinus habetur alexipharmacus, obstruit, dysentericis convenit, "sanguinem concretum resolvit, (siccatus) calculum atterit. Extrinsecus tu-"mores maturat." *Schrod.* 799. where see the præparata and virtues attributed to the Cornu, Lien, Medulla, Sevum, Lac, Lapilli (in ventriculis & felle reperti), Stercus, Urina, Vesica, Omentum, Pellis, & Fel.

But though this is somewhat rank tasted (as is the flesh) and glutinous, sheep's blood is also glutinous; and both of them are eaten by pounds, without any observably different effect: what then can be expected from ʒj? Whether there was any physical reason, for prohibiting the eating of blood under the Law, I cannot determine; but sure I am that boiled blood is not easily digested; and when eaten may be found, at least a considerable part of it, in the fæces alvinæ, little altered; and also that many virtues were attributed to the blood of various animals by the ancients without sufficient reason. Vide *Dioscor.* l. 2. c. 97. p. 118. (who, *Alexiph.* c. 25. p. 411. makes bull's blood a strong poison) and *Galen Simpl.* l. 10. fol. 72, 73. The former, *l. c.* says, "Sanguis anseris, anatis, hædi, utiliter in antidota miscetur. Palumbi

" autem, turturis, columbæ, ac perdicis, recentibus oculorum vulneribus, " iisdem ſugillatis ac luſcioſis illinitur. . . Hirci autem, capræ, cervi, & lepo- " ris ſanguis inaſſatus ſartagine & aſſumptus, dyſenterias & cœliacorum pro- " fluvia ſiſtit. In vino vero potus, contra toxica efficax eſt. . . Caninus com- " mode propinatur a cane rabioſo demorſis, iiſque qui toxicum hauſerunt, &c." In the ſame place you have alſo virtues attributed to the ſanguines teſtudinis terreſtris & marinæ, tauri, equi admiſſarii, chamæleontis, & fœminæ menſtruus. —Pudet!

SERICUM.

SECT. I.

Sericum, Sericum crudum, Folliculi Sericei *offic.* Raw ſilk.—This is a ſingle thread of ſilk curiouſly wound up into a hollow clue, for a nidus to the Bombyx or Silk-worm, until, by a double metamorphoſis, it become a papilio.

Bombyx *offic. Dale* 357. Bombyx, *Aldrov. Inſect* 278. *Ionſ. Inſect.* 114. *Lemery's Dict.* p. 84. Bombyx domeſticus, *Schrod.* 863. " Vermis lanificus " Alb. Mag." *Schrod.* Bombyx, *Matth.* 231. The Silk-worm.

Of ſmall ova, like poppy-ſeeds, in May or June, are hatched little worms, erucæ, or bombyces, which are fed by mulberry-leaves for about ſix weeks, when they become as thick as a ſwan's quill, about two inches long, and give over eating: having moulted four times; and being conveniently diſpoſed of in paper cones, furniſhed with branches, or otherwiſe accommodated for their work, they begin to ſqueeze through a little trunk, between their mouth and ſtomach, a ſtrong ſlender and ſcarcely viſible thread; which each, artfully warping it round itſelf, forms into a neſt, in ſize and figure reſembling a pigeon's egg; ſometimes white and ſometimes yellow. This thread is ſaid by ſome to be 930 feet, by others two French leagues long; and yet is finiſhed and plaiſtered within in ten days. After which it changes its form, and from an eruca becomes an aurelia, chryſalis, or nympha, called the bean-worm, being of a yellowiſh colour, and about the bigneſs of a ſmall bean; ſtirring ſo little, that it appears to be dead for five days, during which time the ſilk is reeled off. From ſuch folliculi, or balls, as are ſaved for propagating the ſpecies, the chryſaliſes, being metamorphoſed into papilios or butterflies (having ſullied the ſilk with their exuviæ and ſuperfluous moiſture) eat their way out, friſk and flutter about till they meet with others of a different ſex, if to be had: then, interveniente coitu triduano, the male dies; the female ſurviving only ſo long as to have time to lay her eggs, which, though 300 or 500 in number, ſhe accompliſhes in a day or two. So that from their hatching to their death there are only ſixty or ſeventy days.

The ſilk manufacture was introduced into Aſia minor and Greece about the time of Juſtinian, (qui imperavit ab an. 527 ad 565); into Sicily and Calabria about the year 1130, on *K. Roger*'s conqueſt of Athens, &c. and *Lewis* XI. firſt brought it into France about 1470, and in 1480 endued the manufacturers with extenſive privileges. Vide *Sav. Dict.* ii. 1912 and 1603.

" Primi ſunt hominum qui noſcantur, ſeres, lanicio ſylvarum nobiles, " perfuſam aqua depectentes frondium canitiem: unde geminus fœminis

" noſtris

" noſtris labor, redordiendi fila, rurſumque texendi. Tam multiplici opere, " tam longinquo orbe petitur, ut in publico matrona tranſluceat." *Plin.* l. 6. c. 17. p. 119. " Tiberius Cæſar edicto promulgavit ne quis vir ſeracio veſti- " mento indutus foras prodiret. *Bod. in Theoph.* p. 425 & 426.

SECT. II.

It is not only uſeleſs in medicine, but, being indigeſtible, may be hurtful. Vide *Kermes.*

" *Officin.* 1. Bombyces integri. 2. Sericum, *i. e.* Textura Bombycina. " 3. Folliculi Sericei. Bombyces exiccati & pulveriſati inſperguntur vertici " capitis ad arcendam vertiginem & convulſionem. Bombycina textura (ut " & folliculi) eſt caliditate & frigiditate temperata, (*al.* cal. 1.) ſiccat 1. cor- " roborat ſpiritus vitales, animales & naturales. Uritur quandoque, quo ſic- " cior reddita lævigetur, quandoque decoctis admiſcentur. Verum præſtat " crudum, & ſolummodo inciſam, adhibere. *N.* Caveatur a folliculis alvi " ſpurcitie fœdatis, vel in quibus adhuc Necydalus latitat mortuus, & vermi- " bus exeſus." *Schrod.* p. 863. *è Matthiolo.*

If crude or raw ſilk have any virtues, it owes them to the viſcous diſſolvable ſubſtance wherewith the inner ſurface of the balls is cemented, or to the ſpurcities *Schroder* cautions to beware of; which is but a ſtinking cordial at beſt: and if it is good for any thing, the inſect certainly is better; for it does not appear to be virulent, (as *Hoffman* on *Schrod.* p. 642. and *Zwelf. Ph. Aug.* 254. make it) ſince not only birds and poultry eat them, but alſo ſometimes German ſoldiers. Vide *Ionſt. H. Inſect.* p. 125. As for the ſubſtance of the ſilk itſelf, a dog's ſtomach cannot diſſolve it. I knew a dog ſwallow about a foot length of a ribbon: it came through him in a day or two; and when waſhed had not a hole in it, but was as tough as ever. But ſilk yields a great deal of volatile ſalt. " Serici crudi ℥xv, analyſed, gave ſalis volatilis ℥ij. ʒij, ſpi- " ritus volatilis ℥iiiſs, & carbonis ℥v. ʒv. (ſo that ℥iij. ʒv. were loſt if there " was no oil). This volatile ſpirit rectified, with ol. cinnamomi, makes what " is called guttæ anglicanæ, as I had it from Dr. Liſter. *K. Charles II.* pur- " chaſed the ſecret from a chymiſt called G. . ." *Tournef. Mem. Acad.* 1700. p. 90. Here is evidently ſome error in the quantity of volatile ſalt: but this is of little conſequence, as the dog's ſtomach could not ſeparate it from the ribbon.

SPERMA CETI.

SECT. I.

Cetus *offic. Dale* 379. Balæna major, inferiore tantum maxilla dentata, macrocephala, bipennis, *R. Syn. Piſc.* p. 15. Balæna macrocephala, quæ binas tantum pinnas laterales habet. *Sibbaldi Phalenolog.* p. 12. Trompa, *Park.* 1607. Cete admirabile aliud, *Cluſ. Exot.* 131. Balæna, *Ionſt. H. Piſc.* p. 151. *R. Ithyolog. tab.* A .1. fig. 3. The Parmaſitty Whale.—It is a very large fiſh, ſometimes fifty or ſixty feet long: (the Dutch call it Pot-walviſh): in or about the brain whereof is found the

Sperma ceti *offic.* which is a white ſcaley pinguedo, mixed with oil, of a rancid oily taſte, and ſtrong ſmell, whilſt crude; but, when refined, of a ſoft taſte, and little ſmell. It is ſaid to be found ſometimes floating on the ſea. —A whale, forty-nine feet long, will yield from his head twelve barrels of Spermaceti oil. See *Squire Dudley*'s account of it, *Phil. Tranſ.* No. 387. p. 256. or *Abridg.* Vol. VII. p. 424. in his *Eſſay on the Natural Hiſtory of Whales:* wherein however there are, in my opinion, ſome things that want confirmation; as his account of ambergriſe; how a whale towed away a forty tun ſloop, with the anchor fluke in her niſket, &c.

The refining of Sperma ceti (and unrefined it cannot be uſed) was long a ſecret, and ſtill is ſuch with many, eſpecially the French: few know how to do it to perfection. The firſt tolerable account I have ſeen of it is in *Fr. Hoffman's Clavis in Pharm. Schrod.* (*Edit. Halæ Saxonum* 1675. in 4to.) from a *Diſſertatio de Spermate Ceti*, by *M. Etmullerus*, who had it from an expert *Pharmacopæus Hafnienſis.* Having thus got the hint, I put the late *Mr. Adam Lindſay*, ſurgeon, on making the experiment; and practice ſoon enabled us to ſhorten and improve the proceſs; which in ſhort is thus performed:

Take the crude Spermaceti, and if oily put it into a hair bag, ſuſpend it till the common oil drop from it, at the ſame time gently expreſſing it; then, having prepared a mixture of ſtrong ſoap-lye p. i. and water p. iii. or iv. (according as the maſs is more or leſs foul) put the Spermaceti into it cold, and work, waſh, or knead, and mix it well with your hands; and when it has ſtood thus a day, put all again into the (waſhed) hair-bag, that the liquor may drain off: the maſs remaining in the bag waſh with clean cold water, and dry in a clean well-aired place. If by colour, taſte, and ſmell, it appears fine enough, nothing remains but to melt it in hot water, ſtirring it well, that no part of the liquor remain adhering; and then let it cool into a cake. If it be ſtill too oily, foul, or rancid, the ſame proceſs muſt be repeated, either with the ſame or freſh liquor, once or again; and ſometimes it is neceſſary to bring it even to boiling over the fire. Thus it may be had either in fine ſemipellucid white cakes, or in ſhining ſnow-like ſcales (by bruiſing it in a mortar) which will keep good, neither rancid to the taſte nor ſmell, for a dozen of years: and thus alſo old yellow rancid Spermaceti may be recovered, both in colour and taſte. "Quoad ſaporem, butyrum quaſi æmulatur, niſi "quod aliquid rancoris linguæ imprimat, prout recentius vel vetuſtius fuerit, "variat. Odor nullus fere eſt, niſi etiam quodammodo rancidus." *Hoffman. in Schrod.* l. c. What I had prepared as above was far leſs rancid than the beſt I ever met with in the ſhops.

Some call Spermaceti Ambra alba; others Flos ſalis aut maris, ſuppoſing it to be the ἅλσανθος Græcorum. "Flos ſalis e Nilo quidem flumine defluit, "ſed & ſtagnis quibuſdam innatat. Aſſumendus qui croci colorem imitatur, "& odore quodammodo eſt ingratiore, veluti garum: interdum etiam magis "graveolens, guſtu mordaciore, ac ſubpinguis. Fucatus autem rubrica, "aut grumoſus improbatur. Præterea ſincerus non niſi oleo reſolvitur: "adulteratus nonnulla ex parte etiam aqua diluitur. . . . Acris eſt atque "igneæ ferventiſque naturæ, uti ſal." *Dioſcor.* l. 5. c. 129. p. 377.

N. B. "*April* 1, 1741. A Cachalot Whale ran a-ground near the bar of "Bayonne, in the river *Adour* in *Gaſcony*. It was forty-nine feet long, twelve

"and

" and a half at its greateſt breadth, and twenty-ſeven round. It afforded " a prodigious quantity of Spermaceti, which is nothing elſe but the brain " of this animal prepared. Its brain and cerebellum filled ten hogſheads " (barriques) which the preparation commonly reduces to one half, or a " third. There was found in its ſtomach a large ball, of ſeven pounds " weight, which was taken for ambergriſe, and bought by a merchant for " 650 livres. It was at firſt pretty ſoft, of a clear red colour, ſmelt ſome- " thing like rotten fiſh, as well as of ambergriſe: but being kept a few " months, it became more brown, and ſmelled more agreeably of amber- " griſe. *Mr. Peyronnie*, who ſhewed the *compagnie* ſome of this true or pre- " tended ambergriſe, is far from thinking that ambergriſe is formed in this " fiſh: on the contrary he believes, that, if it is ſometimes found in the ſto- " machs of theſe animals, it is becauſe they have ſwallowed it, for they are " very voracious. The reſt of the body of this Cachalot was almoſt nothing " but lard or fat, of which they made a great deal of oil." *Hiſt. Academie*, 1741. p. 35.

SECT. II.

It is antacid, diaphoretic, and anodyne, relaxing and lubricating the fibres, and blunting the ſharpneſs of the fluids; called pectoral, emollient, and coſmetic; ſaid to diſſolve coagulated blood; inwardly commended in coughs, hoarſeneſs, pleuriſy, colic, and nephritic pains, grindings, contuſions, &c. and outwardly for pains, redneſs of the face, hardneſs of the mammæ from coagulated milk, pits left by the ſmall-pox, and other foulneſſes of the ſkin. " Eligatur candidum, pingue, recens, non rancidum, &c. *Vires.* Humectat, " reſolvit, anodynum eſt; proin vulgaris uſus in coagulati ſanguinis reſolutione " a caſu vel ſimiliter contracti; in torminibus colicis ſedandis, ut & in tor- " minibus ventris infantum mitigandis, in tuſſi, tartaroque pulmonum de- " mulcendo. Doſis a ℈j. ad ʒj. vel ʒij. Extrinſecus ſunt qui cicatricibus " exanthematum illinunt, ut carne eas repleant." *Schred.* p. 516.

1. It is of a ſoft oily ſubviſcid taſte, and no ſmell; no way acrid, if pure. " Saporis eſt butyracei, & viſcoſi; odoris grati, debilis." *Herman. Cyn.* p. ii. " p. 49. " Saporis pinguis, & piſcoſi." *Dale* 380. " Odoris ſubgravis, " carnium ferarum fere adinſtar; ſaporis acris, fere ut butyri rancidi." *Nucl. Belg.* p. 73. — 2. It keeps long, and, though an animal ſubſtance, neither heat nor alcalies volatiliſe or putrify it, yea rather ſweeten it; as appears by the way of refining it: and it diſſolves in oils, ſpirits, yolks of eggs; and conſumes intirely in the fire. Some make beautiful candles of it. " Neſcio quid " ſit Sperma ceti. Noſtris tam familiare eſt medicamentum, ut Encelius " dicat (2 Metall. 1.) neſcire ſe ad quem non morbum utantur Germani. " Hinc ſplendidum illud nomen *Baldraht*, quod in morbis dubiis, unicum " illorum perfugium eſſet." *Hoffman.* p. 539.

SECT. III.

It may be given to ʒij. and more, powdered with ſugar, or in a ſoft egg, or any way. It gives name to a lohoch in *our* Diſpenſatory. The Unguen-

tum album and Linimentum album, *Pharm. Lond.* conſiſt of oil, wax, and Spermaceti; ceruſſe being omitted. vide *Pemb. Diſp.* p. 363 and 372. who ſays, "In the white ointment, beſides neglecting the formality of the oil of "roſes, the ceruſſe is omitted, this unguent being often uſed to the frettings "of the ſkin in young children; and an application of this corroded lead to "ſuch tender bodies is not unaccompanied with danger." *Their* liniment is only ſofter, p. 372. Is it as effectual in ſcaldings or frettings of the ſkin as the old unguentum album?

STERCORA.

SECT. I.

It is as little neceſſary as pleaſant to rake into dunghills in queſt of medicines, though a variety of *Stercora*, and *Urinæ* alſo, have been very early numbered among them. We have about a dozen Stercora in the works attributed to *Hippocrates*, fourteen in *Dioſcorides*, twenty and upwards in *Galen*, &c. And there is a "Pharmacopœia nova, in qua repoſita ſunt Stercora & Urinæ, "τα ἐυπορισστα, pro omnibus totius corporis morbis internis & externis, per-"facile & optime curandis. Jam primum edita pro pauperibus, militanti-"bus, & omnibus quibus in militia, itineribus, venationibus, rure, ſolitu-"dine, vel alibi, alia medicamenta non ſuppetunt, by *Joh. David Rulandus*, "*Noribergæ* 1644, in 12mo." *Lind. renov.* p. 570. In the *Ph. Lond. edit.* 1682, are Stercora 12. The *edit.* 1721 has five; but the *laſt edition* in 1746 has excluded them altogether. And truly the *M. M.* may well do without them. In the *Ph. Edinb. edit.* 1744, are ſeven Stercora, *viz.* Anſeris, Canis, Columbæ, Equi, Ovis, Pavonis, & Porci; Bovis being omitted, though as much uſed as any of them, and the leaſt fetid.

As for *Urina*; we find in *Hippoc. De Nat. Mul.* (*Ed. Foeſ.*) p. 586. l. 33. Urina Tauri; & *De Morb. Mul.* l. 1. p. 632. l. 19, Urina bubula, & *Ibid.* p. 621. l. 24. and elſewhere, once and again, Urina humana. But they are all uſed only outwardly. *Dioſcorides* has ſeven or eight; and *Galen* about three or four. The laſt edition but two of the *Ph. Lond.* had Urinam Apri, Capræ, Hominis, & Pueri; which were all thrown out of the next edition. *Our* Diſpenſatory retains Urina Hominis: but Urina Vaccina is more uſed.

SECT. II.

They are all putrid and conſequently antacid, emollient, detergent (altho' very dirty ones) diuretic, and ſome of them cathartic; and ſo may do ſervice inwardly in diſeaſes *ab acido & viſcido ſpontaneo*; and outwardly in pains, inflammations, and tumors.—But I know no intention in phyſic which cannot be as well anſwered without them, and much more agreeably. *Jucunde ſanandum.*

For the virtues of theſe excrements, conſult, if you pleaſe, *Schroder.* Tho' if you think it worth while to examine the nature of the dungs and urines of different animals, in order to judge of their virtues, you muſt enquire into their

their food, way of living, and qualities of their natural liquids and ſolids. If a ſimple yielding volatile ſalt is enough to recommend it, and account for its effects, all of them, being chymically analyſed, afford ſuch ſalts and ſpirits: and Stercus humanum not leſs than any of them; which (*venia naſorum*) may be a ſuccedaneum for any of them. And though *Galen* ſays, "Stercus "humanum, ob fœtorem abominandum eſt," yet he gives an inſtance, from his own knowledge, of a wonderful cure of a phlegmon gutturis performed by it. Vide *Simpl.* l. 10. fol. 75. *H.* & 76. *B.* This is ſaid alſo to be a ſpecific, and the only remedy for the bite of a particular Indian ſerpent.

"Stercus (ſays *Galen*, l. c.) vim habet vel maximè digerentem." See alſo *Dioſcorides*, l. 2. c. 98. p. 119.

An infuſion of Sheep's-dung is given in the Small-pox; of Horſe-dung in the Rheumatiſm; of Peacock's-dung in the Epilepſy, &c. and the Aqua & Oleum Stercoris humani are commended by *Matthiolus*, p. 310. for the Epilepſy, Stone, Dropſy, bite of a mad dog or other venomous creatures, inwardly taken; and outwardly for Spots on the Eyes, Ulcers, Cancers, &c. *Dioſcorides* ſays the Stork's dung "comitialibus prodeſt:" but *Galen* denies it. Is the Stercus Pavonis any better?

Urina Vaccina, called Cow-Tea, and ſometimes Aqua omnium florum, (which formerly was a name of Aqua Stercoris Vaccini ſtillatitia) is frequently drank in May by women, to clear their complexion, &c. It commonly purges by ſtool, as well as urine, and ſometimes vomits. For the reſt, vide *Dioſcor.* l. 2. c. 99. p. 120. or *Schroder*, who tranſcribes him, thus, "Pavonis Ster-"cus, proprietate vertiginem & epilepſiam ſanat; nimirum exiccatum & pul-"veriſatum (ʒj.) maceratur per noctem in vino: hinc trajectum per linteum "exhibetur, continuando a novilunio uſque ad plenilunium aut amplius, ſi "opus ſit. Crato miſcet cum ſaccharo & exhibet." *Schrod.* 847.

"Humanum Stercus recens impoſitum vulnera ab inflammatione vindicat, "ſimul & agglutinat. Siccum vero cum melle perunctum anginoſis auxiliari "traditur. . . . Cæterum humanum Stercus ſiccum cum melle ſubactum, & "gutturi impoſitum, quemadmodum & caninum, anginoſis opitulari inter "arcana reperimus." *Dioſc.* l. 2. c. 98. p. 120. See there enough of dungs: and among the reſt a cure for the Sciatica, p. 119. *D. Cap.* 99. is *De Urinis*, and begins thus: "Humanum urinam ſuam cuique bibere prodeſt contra "viperæ morſus, & lethalia pharmaca, incipientemque hydropem. . . Canina "rabidi canis morſibus perfundendis idonea: &c.

I ſhall now give you ſome extracts, relative to the ſubjects laſt treated of, &c. from *Macquer*'s *Chemie Prat. Tome II.*

1. *Butter* by diſtillation is reſolvable into acidulous phlegm, a thin oil, and a ſmall quantity of a carbo. Vide p. 358.

2. *Cheeſe*, when new, affords by diſtillation an acidulous phlegm, a thin light, and a thick heavy oil, and large carbo.—The firſt phlegm of both is from the remaining ſerum: but the acid here is in leſs quantity, and alſo weaker, than in the former. The carbo could not be reduced to aſhes by ſix hours calcination in a ſtrong open fire, but ſtill flaſhed with nitre, p. 365.

3. *Whey*

3. *Whey*, firſt evaporated almoſt dry and then diſtillled, gave phlegm, an acid ſpirit, and thick oil; with a carbo, which moiſtened in the air, yielded to water, ſea-ſalt, and after calcination gave marks of a fixed alkali, p. 368.

It is here obſervable, that none of the above yielded any volatile alkali, as do all animal ſubſtances beſides. Would the chyle yield any? probably it would. Are the animal juices of the chyle ſeparated from the milk in its proper ſecretory organs? Our author thinks ſo; (p. 371.) and that in this the milk chiefly differs from the chyle, p. 368.

4. *Blood* contains much phlegm, near ſeven eighth parts of it being pure water; which being evaporated in *B. M.* and the dried ſubſtance diſtilled per retortam, there riſes ſtill ſome phlegm, but impregnated with a volatile alcali; then a yellow oil, a very penetrating volatile ſpirit, volatile ſalt, and at laſt a pitchy oil; there remaining a carbo which contains ſome ſea ſalt, but no fixed alcali. No volatile ſalt can be raiſed from it by the heat of boiling water.

Hence it follows that the volatile ſalt, which riſes with a greater heat, is either the work of fire, or comes from the decompoſitum of an ammoniacal ſalt: for if it exiſted compleatly formed it would riſe almoſt of itſelf, and at the firſt impreſſion of heat; as it does from blood putrified, or any putrified ſubſtance, even before the firſt phlegm. Putrid blood therefore muſt not be dried before diſtillation. See p. 374—386; where the author determines, in favour of *M. Homberg*, that there is an acid got from blood; though the proof is but lame. *Vide* p. 383.

5. *Lean Beef* diſtilled in *B. M.* yields half its weight at leaſt of phlegm; and by increaſed heat the ſame principles as blood. (vide *Geoff. Mem.* 1730.) Four ounces of lean beef, often decocted in three chopines of water and evaporated to a moderately ſolid extract, gave ʒj. gr. ij. of volatile ſalt (in flat cryſtals parallelopipedal) of ſpirit and oil gr. xxxviij, and of carbo gr. vj, which contained ſea ſalt. The remaining fibres analyſed gave (being firſt dried) volatile ſpirit, and volatile ſalt in ramifications, a thick oil, and carbo, which contained no ſalt, p. 391—5: where ſee the analyſis of ox bones, which yielded more of their principles to water than the fleſh did, p. 391.

6. The analyſis of *Mutton Suet* agrees much with that of butter, affording a very acid phlegm, thin oil, butter, and a little carbo. By repeated diſtillalations it turns into fluid and permanently limpid oil; but no volatile alcali can be got from it, if freed of all the membranes, fleſh, veſſels, &c. p. 394.

7. The *Whites of Eggs*, boiled hard, by diſtillation yield nine tenth-parts of inſipid phlegm, a volatile oily ſpirit, a yellow oil, volatile ſalt, thick oil, and carbo. The yolks, after, by frying &c. the oil is expreſſed, yield the ſame principles with the whites. "Of theſe two ſubſtances the yolk contains the "germ of the chick, and is deſtined to give it birth (*naiſſance*); the white ſerves for the nouriſhment or increaſe of the chick une fois formé." Vide p. 397.—(Strange! The contrary of this is true.)

8. *Stercus humanum* diſtilled *Bal. Mar.* gives an inſipid but fetid phlegm; and there will remain in the cucurbite about an eighth part of dry ſtuff, which by a retort affords volatile ſpirit, ſalt, fetid oil, and carbo. Hence it is evident that theſe excrements are not, compleatly at leaſt, putrified: for all compleately putrified ſubſtances contain a volatile alcali intirely formed and developed, which riſes with a heat leſs than that of boiling water, and mounts up always firſt in diſtillation.

Mr.

Mr. Homberg diluted freſh excrements with boiling water, (taking a pint for each ounce) and when cold poured off the liquor, which he evaporated to a pellicle. There were formed in it long cryſtals, of four, five, and ſix ſides, which he thought might be called their eſſential ſalt, flaſhed like nitre, but burnt more ſlowly, and with a red flame, containing more oil than common nitre. He diſtilled it four times. It gave an acrid and acid liquor, a little red oil; but when the oil began to come over, the retort took fire: ſo that it contained true nitre.

Mr. H. alſo diſtilled the Stercus to dryneſs (in *B. M.*) powdered it, and infuſed it in ſix times as much of its phlegm, which he had ſeparated by diſtillation; which he kept warm in a large cucurbit for ſix weeks in order to fermentation, and then diſtilled it in the ſame *B. M.* drawing off all the aqueous humidity, which had loſt almoſt all its fœtor, which was changed into *une ſimple odeur fade.* This water he found to be an excellent coſmetic. After this diſtillation

The reſiduum in the cucurbit had not only loſt its ſtink, but had an agreeable aromatic ſmell; and the veſſel wherein it was digeſted, in ſome time, ſmelled much of ambergriſe. This dried aromatic excrement, diſtilled in B. Arenæ, gave firſt ſome phlegm, then an oil as clear as fountain water; and by an increaſed heat a good deal of red oil; and there remained an eaſily inflammable carbo.

He diſtilled alſo this *matiere fecale* with different ſubſtances, as with vitriol and with alum; and obſerved that the reſiduums of the diſtillations with theſe ſalts were true Phoſphori. See *Mem. Acad.* 1711. and *our Author*, p. 402—416.

9. *Urine* diſtilled in *B. M.* gives thirty-nine fortieth parts of it of inſipid phlegm; but ſmelling of it; and the dark red reſiduum, mixed with ſand, by an increaſed heat, ſome more phlegm, a volatile ſpirit, a yellow oily liquor, and with it volatile ſalt, and at laſt a fetid oil; there remaining a carbo containing ſome ſea ſalt. The effect of fixed alcalies and C. viva on urine, and other animal ſubſtances, ſeems to prove that they contain a neutral ſalt of the ammoniacal kind.

10. *Volatile ſalts*, though by rectification rendered white and pure, in time grow yellow, which diſtilling them with ſea-ſalt and chalk will prevent, according to *Boerhaave:* combining them with the marine acid, and ſeparating them by a fixed alcali, renders them as pure as art can make them, and always the ſame, from whatever ſubſtance they were at firſt produced, p. 422.

11. (α) *M. Duhamel*, in diſtilling Sal Ammoniac with Salt of Tartar, and Salt of Kali, both well dried, obtained a quantity of volatile ſalt equal to, yea and exceeding, that of the Sal Ammoniac made uſe of: whence he concludes, that the volatile ſalt volatiliſed, and raiſed with it part of the fixed ſalt employed. (β) When he diſtilled Sal Ammoniac with Calx viva *non extincta*, without adding any water, he got no volatile ſpirit, or ſo ſmall a quantity that it might be reckoned none, and owing to the humidity neceſſarily contained in the Sal Ammoniac, and what the Calx got from the air, though expoſed to it but a very ſhort time: whence he aſſerts that the volatile ſpirit, drawn from Sal Ammoniac by means of Calx viva, is liquid only by reaſon of the water contained in the Calx viva. (γ) He diſtilled alſo Sal Ammoniac with Chalk quite dry, and got volatile ſalt, as well as when fixed ſalts were employed, which had raiſed with them part of this earthy intermediate ſub-

ſtance.—Hence he infers, that volatile ſalt cannot be ſublimed from Sal Ammoniac, without carrying along with it a part of the intermediate ſubſtance, or ſomething elſe to which it can unite: that alcaline fixed ſalts, chalk, and the like, have the firſt property; but quick-lime the ſecond, being capable only of raiſing the volatile alcali, when charged with an humidity, which joined to the ſalt ſublimes with it, and ſo muſt be in a liquid form. But why does not ſome of the lime riſe as well as ſome of the other intermediate ſubſtances? "Quicklime, ſays M. Duhamel, is an earth by calcination di-"veſted of almoſt all its humidity, acid, and oil (gras) . . . . it is acrid alſo, "and cauſtic, and ſtrongly attracts moiſture: it abſorbs acids, and ſtrongly "retains them; and, in fine, it ſo unites with fat ſubſtances as to make with "them a kind of ſoap." Hence he thinks that quick-lime acts not only on the acid of Sal Ammoniac, but alſo on the matiere graſſe, which always accompanies and is of the eſſence with volatile alcalies, and conſequently decompoſes them; which he proves by this experiment: He took the volatile ſpirit diſtilled with quick-lime, and made it paſs ſeveral times through quick-lime (il l'a repaſſé pluſieurs fois ſur de nouvelle chaux vive). The quantity of this ſpirit was ſenſibly diminiſhed every time; and the quick-lime was ſo charged with fat (graiſſe) that not only the vitriolic acid poured on it became very ſulphureous, but, when it was calcined in a crucible, it was eaſy to diſcover it by the ſmell of burning greaſe which it yielded. Fixed alcali ſalts abſorb indeed and retain oily matter (matieres graſſes) but not ſo ſtrongly as lime, becauſe never quite deprived of what oil they originally contained; and quick-lime appears to be abſolutely free of all oily ſubſtances. (See his two experiments confirming this, p. 453.)

To diſcover whether the Salt of Tartar, and the chalk, raiſed by the volatile alcali, were really volatiliſed, and become one with it; or only ſuperficially united; he diſtilled them in much water, and with the heat of the air; but nothing remained in the bottom of the veſſel. Acids had no better ſucceſs. But expoſed dry to the air, covered with gawze only, the fixed part was left after the diſſipation of the volatile; and was fixed in the fire. *Vide* p. 444—458.

TESTÆ.

SECT. I.

1. Dentalium, *offic.* Dentalium, *Charlet. Exerc. Piſc.* 63. *Worm. Muſ.* 252. Dentale leve, album, altera extremitate rufeſcens, *Liſter. Hiſt. Conch.* iv. *Sect.* 11. N°. 2. Dentales, *Geſn. de Aquat.* 345. "Autales dicuntur alii ejuſdem for-"mæ, ſed minores, *Bonan.* 91. Dentalium, *offic.* The Dog-like-tooth-ſhell." *Dale* 362. The Dog-tooth Shell.—This is long and round, a little arched and tapering, tubular, open at both ends, of a whitiſh colour, and a little reddiſh at one end.

"Tellinis adnaſci ſolent, ut balani aliis cruſtaceis." *Worm.* "In mari "Britannico capiuntur." *Dale.* "Tellina, *offic.* The Limpin." *Dale* 367.

2. Entalium, *offic.* Autales, *Geſn. Aquat.* 345. Tubulus *aut* Siphunculus maris, *Bonan.* 91. Dentalium primum & quartum, *Aldrov. de Aquat.* 283. Dentale viride, ſtriatim, maximis ſtriæ raræ, majuſculæ, admodum extantes; minimis

minimis ſtriæ denſæ & tenuiores, *Liſter. Hiſt. Conch.* iv. *Sect.* 11. N°. 1. Denticuli Elephantis, *Rumph.* 125. *tab.* 41. 1. *Valent. Muſ.* 187. Entalium, *offic.* The Entaglia, *Dale* 362. Entalium. *Schrod.* 852.—It is larger than the former every way, deeply ſtriated, and ſomewhat greeniſh coloured.

" Ex India Orientali transfertur. Itali moderni lapides, metalla, lignæ " quæcunque lineis aut figuris inſculpta, aut etiam cannulata *Entaglio* vocant, " unde, & a vocis Dentalii proximitate, Entalii nomen ortum habuiſſe con- " jectat erud. D. M. Liſter. Qui plura de his deſiderat, conſulat Act. Phil. " No. 197." (p. 641.) *Dale.* " In officinis officula e capite exempta aſelli " majoris, pharmacopolis noſtris, lapides dentales dicuntur." *Dale* 372. And the concha venerea, minima, tota alba, nucleum avellanæ non ſuperans magnitudine, *Worm.* 252. in ſhops ſometimes ſupplies the place of the Dentalium (as in *Schroder* it ſeems to do) and ſometimes of the Entalium.

They, with ſeveral other uſeleſs ſubſtances, are in the Ung. citrinum ſeu baſilicum *Nicolai* (Vide *Zwelf. Pharm. Aug.* 345.) and were retained in the *Lond. Diſp.* (wherein were Dentale ſive concha veneris, & Autale vel Porcellana *p. p.*) till the edition 1721. when ointment, and ſhells too, were thrown out. This ointment, with the Dentale and Entale in it, is in *Ph. Aug. Edit.* 1684. *in folio.*

3. Teſta Sepiæ, Os Sepiæ & Sepium, *offic.* The Cuttle-bone.—This is a light ſpongy friable teſtaceous ſubſtance, ſometimes ſix inches long, two broad, and half an inch thick in the middle, thin at the edges, of a white colour; formed on the back of the Sepia *offic.* Sepia, *Aldrov. Exang.* 44. *Geſn. Aquat.* 851. *Charl. Piſc.* 51. *Ionſ. H. Exang.* p. 7. " Loligo, Sepia, *Merr. pin.* 191. " Sepia *offic. Dale* 361. The Cull, Cuttle, or Cuttle-fiſh: which is found often on the ſhore of the Mediterranean ſea.

" Piſcis eſt qui in pedibus habet ſuccum nigerrimum inſtar atramenti, " quem Chinenſes cum brodio oryzæ vel alterius leguminis inſpiſſant, & for- " mant, & in univerſum orbem tranſmittunt, ſub nomine atramenti Chinen- " ſis." *Herman.* p. 17. *Part.* 2. *Cynoſuræ.* With this ink it makes the water muddy when in danger of being taken. " Sepia vocatur à σηπω putrefacio; " quod atramento, veluti putrida quadam ſanie, quam Græci σηπεδονα vocant, " abundet." *Charlet.* l. c.

4. Teſta Oſtreæ *offic.* Oſtrea major, ſulcata; inequaliter utrinque ad cardinem denticulata, *Liſter. H. Conch.* iii. 20. Concha ſatis nota in cænis, Oſtrea Latine dicta, non Oſtreum, *Bonan.* 108. t. 70. Teſtaceum, quod Latini Oſtreum & Oſtream vocant. *Ionſ. H. Exang. Aquat.* 44. Oſtreum *offic. Dale* 365. The Oiſter.

" Peculiariter vero contra leporis marini venena & Oſtrea adverſantur. " Idem videtur, nec poteſt videri ſatis dictum de his, cum palma menſarum " diu jam tribuatur illis. . . . Præcipua habentur ſpiſſa, nec ſaliva ſua lubrica, " craſſitudine potius ſpectanda quam latitudine. . . . Cyzicena majora lucrinis, " dulciora Britannicis, ſuaviora Adultis, aeriora Lepticis, &c." *Plin.* l. 32. c. 6. p. 773.

5. Umbilicus marinus *offic.* Umbilicus marinus, *Worm.* 72. *Dale* 363. *Bellon. de Aquat.* 430. " Quibuſdam Umbilicus Veneris; Germanis Meer- " bonen, *i. e.* Faba marina; Cretenſes Oculum marinum vocant, quod geſ- " tatus oculis prodeſſe dicatur." *Worm. l. c.* Sea Bean, or Sea Navel.—This is a roundiſh flat ſolid teſtaceous ſubſtance, plain on one ſide, ſomewhat con-

vex on the other, with an Umbilicus; of ſeveral colours and ſizes, formed on the head of the

Cochlea cælata, *Aldrov. de Exang.* 393. *Ionſ. de Exang.* p. 38. t. 12. *Geſn. de Aquat.* 240. *Dale* 363. Cochlea cælata, antonomaſticè dicta, *Bonan.* 114. The emboſſed (nonne potius *covered)* Sea-Snail.

" In Mari Mediterraneo invenitur. D. J. Raius ipſum piſcem vivum in teſta " ſua, hujuſmodi tectum operculo. Recens e mari extractum Romæ nactus eſt." *Dale* 363. " Habentur palma magnitudinis. Dum cochlea repit, ſcutum " hoc in caput deportat; & dicitur eſſe ejus roboris, ut licet vir fortis pre- " hendat, nullo modo eripere poſſit." *Albin. MS. Wormius* had one four inches over the longeſt way, for it is ſomewhat oval. I have one of $1\frac{3}{4}$ inch, and ſome but about half an inch over. " Teſta in aceto macerata, ſuperiore ve- " luti cute, vel cruſtæ ſpoliatur, redditurque cochleæ margaritiferæ modo " ſplendens, nitida, & unionis modo colorata." *Ionſ. Exang.* p. 38. Vinegar had a contrary effect on the Umbilicus on which I tried it; and ſpoiled both its colour and ſmoothneſs.

SECT. II.

They are all abſorbents, like Crabs-Eyes. We uſe only the Oiſter-Shell, and Cuttle-Bone. They are prepared by levigation. Calcined they become a Calx viva. The doſe of theſe (prepared) may be ʒj.

" Os Sepiæ exiccat, abſtergit (pulveriſatum vel incineratum) maculis, ne- " vis, ſcabiei humidæ medetur. Oculis convenit (cum melle cinis inditus) " gingivis tumidis ſubvenit (in dentifriciis) aſthmaticis auxilio eſt (aſſumptus) " gonorrhœam ſiſtit, calculos pellit, urinas movet, pulvis aſſumptus ℈j. doſi." *Schrod.* p. 857; who commends the Oſtrea for peſtilential bubos only out- " wardly. V. p. 855. See alſo *Plin.* l. 32. c. 6. p. 773. Umbilicus marinus " a puellis geſtatus illis gratiam & amabilitatem conciliare creditur, earum- " que morbos avertere, &c." *Worm.* 73.

" ℞ Dentale: Tere in pulverem, & exhibe ʒß cum aq. deſtil. cinnamomi, " vel alia, ad abſorbenda acida. Verſa (*viz.* Dentali, Entali, Umbil. mari- " nus) in calcem fiunt ſpecificum contra quartanam." *Herm. Cyn.* ii. p. 38.

UNGUIS.

SECT. I.

Unguis odoratus, Blatta Byzantina *offic.* Blatta Byzanzia, ὄνυξ, Unguis odoratus, *Schrod.* 849. Unguis odoratus, *Matth.* p. 246. Blatta Byzantia Arabum. *Aldrov. Exang.* 346. Blatta Byzantia ſive Unguis odoratus. *Park.* 1573. Blatta Byzantina, *off.* The Conſtantinople Sweet-hoof. *Dale*, p. 363. —What the Onyx vel Unguis, Conchylii tegumentum, of Dioſcor. l. 2. c. 10. p. 91. was I know not. I ſhew you what *Matthiolus* and ſome others take for it. *Dale* has ſaid as much of it as I can; and to him I refer you. It is not in uſe: and indeed I think it uſeleſs. You have *Dr. Liſter*'s conjectures concerning it in the *Phil. Tranſ.* No. 197. p. 642. When burning it ſmelled ſomewhat like caſtor, ſays *Dioſcorides.* " Whilſt burning it does not ſmell of

" caſtor, but of burnt horns." *Lem. Dict.* 82. " Odore gravi aloen Barba-
" denſem æmulans." *Dale.* What I burnt had a ſtrong diffuſive ſmell, ſome-
what like that of caſtor; more like that of burnt horns; but moſt of all it reſembled the ſcent of Barbadoes aloes, mixed with ſea-ware; if my noſe deceived me not.

" Unguis odoratus internè laxat alvum, ſplenem mollit, vitioſoſque humo-
" res diſcutit. Externè excitat ſuffitu fœminas ſtrangulatu uteri oppreſſas,
" comitialeſque. In reliquis idem præſtare poterit, quod aliæ concharum
" teſtæ." *Schrod.* 849.

UNGULA ALCI.

SECT. I.

Alce *offic.* Alce, *Ionſ. Hiſt. Quad.* 65. *Aldrov. de Quad.* p. 866. *Geſn. de Quad.* 1. *Charl.* (Alces) *Ex.* p. 12. *R. Syn. Anim.* 86. *Dale* 403. The Elk—is the largeſt of the Cervinum genus, with palmed (not branched) horns, and a native of Scandinavia, Muſcovy, Lithuania. It is thought to be the Onager Plinii, *Hoffman.* p. 522. for which I cannot find a reaſon. The hoof only is uſed.

" Germanis dicitur Elend, ſeu Miſeria, tum quod ſingulis diebus morbo
" comitiali laboret, nec citius ab eo levetur, quam dextri poſterioris pedis
" Ungulam, auriculæ ſiniſtræ immiſerit: tum quod leviſſimo etiam vulnere
" accepto exſpiret." *Ionſt. Quad.* 65. *Andreas Baccius*, *Apollonius Menabenus*, and *Johannes Wigandus*, have written treatiſes on this animal. It is Alce, Alces: Alces, Alcis; or Alces, Alcæ. Gr. ἄλκη.

" In Finlandia Alcen vidi ſeptemdecim palmas altam." *Schrod.* 791.

SECT. II.

The Elk's claw is called a ſpecific antiepileptic, both inwardly taken and outwardly applied; and it is alſo commended for all convulſive and hyſteric diſorders. For my part I think Aſſes hoofs as good.

" *Officin.* Ungula, ac Nervi Alces, Ungula ſpecificâ virtute celebratur ad-
" verſus epilepſiam, tum præcavendo, tum curando, idque uſu tam interno,
" quam externo. Interne propinatur ſcobs, & præparata ſubjuncta. Exter-
" ne, includitur particula annulo, geſtaturque digito, qui minimo proximus
" eſt, ut palmam reſpiciat: inditur itidem pugno, applicatur pulſui, immit-
" titur in aurem ſiniſtram, ſuſpenditur de collo, ut cutim attingat. Doſis ℈ß
" & ultra ℈j. *N.* Dignoſcitur odore, quem gratum ſuffitu exhibet. Nervi
" circumligantur membris ſpaſmo obnoxiis. *Præpar.* 1. Ungulæ præparatæ,
" lege communi. 2. Magiſterium. Fit l. c. aceto vel ſp. vitrioli, & oleo
" tartari. 3. Sunt qui aquam ex medulla cerebri deſtillatam pro arcano
" epileptico habent. 4. Exhibere itidem poterit oleum, liquorem, ac ſal
" volatile, l. com." *Schrod.* 791.

1. It is a hard horny ſubſtance, without any taſte or ſmell, and probably indigeſtible. I burnt ſome of it, but could obſerve no difference betwixt the ſcent

ſcent of it and of a ſheep's claw.—2. The animal itſelf is ſaid to be epileptic, and to drive away the paroxyſms by ſcratching its ears with the claws of the hinder foot. Granting this to be true, it is but a bad reaſon for attributing an antiepileptic virtue to the claw; ſince it often relapſes, though it always keeps its hoofs: ſo that the virtue muſt be in the ſcratching, not in the claws: it may be ſo convulſed as to ſtrike itſelf, and the ſtrokes may raiſe it out of the fit. "Hoc animal epilepticum creditur eſſe, & depellere paroxyſmum ſcalptu "poſterioris Ungulæ poſt aures, unde remedium eſt factum apud nos tam "famigeratum, ut nullus infans ſit, qui non geſtet in collo, amuleti loco, "particulam Ungulæ." *Hoffman.* p. 522. — 3. It is owned by the advocates for this virtue, that every Elk's hoof has it not. According to *Olaus Magnus* it muſt be the outer claw of the right hinder foot of a male Elk which has never copulated with a female, cut off from the animal alive, after the middle of Auguſt. "Applicatur rectè, (ſays he) ſi vel ſiniſtræ manus annulari "adponatur: vel annulus ex eadem factus eidem indatur, vel pars unguis "ſiniſtræ palmæ imponatur, manuſque in pugnum complicetur; vel ejuſdem "potiuncula in aurem ſiniſtram miſſa, & aliquamdiu veluti ſcalpendo movea-"tur." *Ionſ. Quad.* p. 66. If thus it cured, ſurely the Elk would never have a fit of that diſeaſe. "Referunt non quodlibet hujus ſpeciei animal, malo "epileptico corripi, nec omnia eadem proprietate prædita eſſe, ſed pro ætate, "ſexu, tempore, & ipſius etiam Ungulæ ratione, plurimum variare. Fœminæ "Ungulam hac facultate nequaquam pollere, ſed maris ſolum, nec pulli, ſed "adulti; idque eo tempore quo in venerem ferri incipit (inter feſtum aſſump-"tionis Mariæ & nativitatis ejuſdem, *i. e.* inter 4 Julii, & 8 Septembris). "Plus etiam Unguibus poſterioribus, quam anterioribus tribuunt, & horum "quidam pedi (quod vulgatius) dextro, alii ſiniſtro. Sunt qui velint has "Ung. ab animali adhuc vivente dicto tempore, præſcindendas eſſe. *And.* "*Bacc. l. de Alce.*" *Schrod.* p. 791. But how can we know that any hoof has all theſe qualifications? And though it had, what virtue could thus be communicated to it? Do they not ſmell ſtrong of the mountebank? eſpecially ſince it is made as efficacious outwardly applied, as taken inwardly. I have no faith in amulets, nor amulet-mongers. Vide *Hoffman. in Schrod. Mangeti*, p. 587. *& ibi citatos.* And—4. As it has not the honour of having been long in reputation, ſo now it is generally contemned. I do not find it in *Gordon*'s *Lilium Medicinæ* among the remedies for the epilepſy; nor in any author before him: though the Ungulæ Aſini have *Dioſcorides*'s authority for their uſe in that diſeaſe. "Ungulæ Aſinorum uſtæ (ὄνυχες ὄνων καιντες, &c.) ad dies multos "cochlearibus binis potæ comitialibus prodeſſe narrantur. Oleo vero ſub-"actæ ſtrumas diſcutiunt: inſperſæ quoque pernionibus medentur." *Dioſcor.* l. 2. c. 44. *totum*, p. 98. "Aſininum hepar inaſſatum eſu comitialibus pro-"deſt." *Dioſcor.* l. 2. c. 42. "Lichenes equorum calli ſunt circa genua & "Ungulas, in earum partium flexu indurati. Ii triti & in aceto poti comitiali-"bus mederi traduntur." *Dioſcor.* l. 2. c. 45. p. 99. Theſe lichenes, called verrucæ equinæ commonly, were uſed inwardly for cancers by *Dr. P. V. Caſſumuniar.* But the lac of either of theſe animals is of more uſe for tender conſumptive people, than all their parts are for any diſeaſe whatſoever.

Whether Elk's-hoofs or Horſe's-bones would make the beſt anodyne necklaces, let thoſe determine who expect any benefit from either: I do not. "Va-"let autem Ungula ad epilepſiam, convulſiones, tetanum, tremores, vertigi-

"nem,

" nem, palpitationem cordis, & hyſtericam paſſionem, & ſimiles ſpaſmodicos " motus." *Nucl. Belg.* p. 11. Credat, & utatur qui vult. It may be given to ℈j. yea ʒj, if you pleaſe. It is thrown out of our Pulvis ad Guttetam; in which it had a place too long.

ZIBETHUM.

SECT. I.

Zibethum *offic.* Civet—is a ſoft unctuous ſubſtance, of the conſiſtence of butter, white at firſt, then yellow, and at length brown, of a warm rancid yet aromatic fat taſte; and very fetid or very ſweet ſmell, according to its age and quantity; found in a bag ſituated between the anus and pudenda of an animal, thence called the

Animal Zibethicum *offic.* The Civet-Cat, *Dale*, p. 411. Animal Zibethicum, *R. Syn. Quad.* 178. Animal Zibethi, *Aldrov. de Quad. digit.* 340. *Ionſ. de Quad.* 109. *Charl. Exerc.* 20. Catus Zibethinus, *Schrod.* 804. Hyæna Veterum, *Ballon. Obſ.* l. 2. c. 20. p. 94. The Civet Cat, rather Civet (Dog, Fox, or) Animal.

It is a native of Africa and both the Indies; and has ſeveral times been brought to Europe and tamed, though naturally as wild and rapacious as a Fox. By its head, ſnout, teeth, &c. it appears to be of the canine genus. There is a Treatiſe by *Petrus Caſtellus Romanus*, called *Exetaſis de Hyæna odorifera Meſſanæ* 1638. *in* 4to, & *auctior & figuris æneis adornata Francofurti*, 1668. in 12mo; alſo in *Ionſt. Hiſt. Quad.* p. 151 ad 163. Many others have written, more or leſs, about this animal, its ſac, perfume, &c. as *Fallopius*, *Bartholinus*, *Perault*, &c. But none perhaps ſo accurately as *Mr. Morand*, in the *Mem. Acad. R.* 1728. p. 568. " The ſac is ſituated between the anus " and pudenda, in both male and female: in figure it reſembles two little " pears conjoined, with a common opening; being divided into two cavities, " a little larger at bottom than towards the neck; each cavity being between " two and three inches deep, and both together about as much in breadth. " This ſac is covered with the ſkin, and conſiſts of four coats; firſt, a pretty " ſtrong membranous coat; then a muſcular; next a thin membranous and " vaſcular one; and laſt of all a glandular coat, two lines thick, (*i. e.* $\frac{1}{6}$ inch) " conſiſting of a vaſt number of glands, and many follicles, or reſervoirs of " the perfume, filtered in the glands, and conveyed by theſe reſervoirs into " the bag, into which they have each a viſible opening. Each cavity of the " ſac contains (*un paquet*) a parcel of a ſort of ſhort ſilk, ſoaked with the " odoriferous oil, or perfume. Every reſervoir alſo is endued with ſmall bits " of ſuch ſilk, whence it is conveyed into the ſac, and there forms the pelo- " tons in its cavities. Hence this animal has a natural (*caſſolete*) perfuming- " pot (or box), conſiſting of a capſula, perfume, and ſponge to retain it; " without which, the ſac having neither valve nor ſphincter, the odoriferous oil " would run out as faſt as it run in." Thus *Mr. Morand.*

" Si Pandectario fides *Zebet* ſpuma ſignificabit, & non inepte noſtro Zibe- " tho aptabitur metaphora; ſiquidem quum colligitur, irato animali, quaſi " ſpumans apparet." Vide *Caſtell. Ionſt. H. Quad.* p. 151.

SECT.

SECT. II.

It has the virtues of Muſk; is called cordial, nervine, and anodyne; and commended in the epilepſy, hyſteric fits, colic, frigidity, &c. But it is now little uſed. The doſe is made to gr. iij. or iv.

" Zibethum, Civeta, Zibetta, calidum & humidum eſt, atque anodynum. " Uſus crebri, in dolore colico, (inungitur umbilico) in dolore ventris infan- " tum, in ſtrangulatu uteri applicatur vulvæ, vel cavernulæ umbilici." *Schrod.* 804. " Viribus & doſi (*i. e.* ad gr. ij.) cum Moſcho fere convenit, " & eodem modo nocet." *Nucl. Belg.* 314. " Hujus uſus potius externus " quam internus. Eſt antiepilepticum, antihyſtericum, nervinum, & ano- " dynum." *Herman. Cynoſ.* p. 41. partis 2.

1. It is of a fat rancid taſte, like that of muſty butter, but not ſweet, then warm and penetrating, with the flavour of angelica root, which continues ſome minutes, but without acrimony; and of a fragrant ſmell: but in large quantities, and alone, it is fetid and diſagreeable. " Quia ſapor a nemine, quod " ſciam, eſt deguſtatus, ideo ex hoc nihil colligere poſſumus certi." *Caſtel. Ionſt. Quad.* 162. " Saporis ſubacris, odoris fragrantiſſimi." *Herman. Cynoſ.* ii. p. 41. " Odoris eſt fragrantiſſimi & grati.' *Dale* 411. " Saporis ſebacei & " tandem acris, odoris fortis & ingrati, præcipue mulierculis hyſtericis, &c." *Nucl. Belg.* 314. — 2. It is an animal ſubſtance: and as by the ſituation of the glands, that prepare and ſeparate it, it appears to be of the ſame uſe to the animal that Muſk is to the Muſk animal, ſo probably their virtues are much the ſame, internè & externè. Its ſmell is reckoned equally hurtful with Muſk to hyſteric and vapouriſh people. (*Qu.* Whether by relaxing too much the nerves, like exceſſive pleaſure?) However it ſeems to have been but little uſed inwardly, for ſome time at leaſt, if it was not in confections and cordial drachms. See *Caſtellus Ionſton.* for numerous authorities for its ſucceſs in hyſteric fits, barrenneſs, frigidity, outwardly applied. " Videtur partibus geni- " talibus dicatum pharmacum, de quo Caſtor Durantes ita cecinit,

" Zibethi Veneris creſcunt ſolatia odore,
" Adjuvat hoc uterum ne præfocetur, & inde
" Eſt adeo vulvæ gratum, ut proclivis ad illud
" Quamvis admotum irrepat. . . . . .

" *Ruellius* vero inquit, ſi cavernulæ umbilici admoveatur, tradunt converſum " in alterutram partem uterum, in ſuam reſilire ſedem: aut ſi ſurſum verſus " impulſus opprimat, ſubdito eo devocari; tam amans hujus odoramenti " vulva, ut ad id, undecunque admotum irrepat. Idem tradit Matthiolus, " Renodæus, Amatus, &c." Thus *Caſtellus*, inter alia. But that Civet cures hyſteric paroxyſms by drawing the uterus up or down, as is above ſaid, agrees as ill with the anatomy of the part as with the ætiology of the diſeaſe, aſſert it who will. " Si vir ante concubitum, glandem Zibetto inungat, cum " odore illius uterus delectetur, citius eum ſemen excipere plerique docent." *Plater. Prax. Tom.* i. p. 489.

" ℞ Zibethi gr. iij. Caſtor ℈j. Conſer. Fl. Anthoſ. (vel) Syr. Matricar. q. ſ. " F. Electuarium (*bolus*) antihyſtericum." *Herm. Cyn. partis* 2. p. 41. " Zi- " bethum optimè ſolvitur cum ſaccharo, aut ſpiritu vini." *Boecl. in Herm. Cyn. part.* 2. p. 44. who adds, " ingreditur balſama, & ſuffumigia, & unguenta."

APPEN-

APPENDIX.

ON THE

METHOD OF PRESCRIBING.

SECT. I.

MY design here is briefly to direct how such as are sufficiently instructed in the Methodus medendi, or Indicationum doctrina, as well as in the Materia Medica, may prescribe the conjoining of such simples, in any case, as the intention of cure points out, in such forms as best suit the circumstances of the sick, and nature of the remedies, *ut tutò, citò, & jucundè sanetur.*

I own there is here no mystery in this; nay very little difficulty but what arises from the rules (generally laid down) needlessly multiplied, their inconsistencies in different authors, and the supercilious disregard which some shew to the commonly received notion or character of some of the formulæ.

For without consulting *Lubertus Esthius*, *Caspar Bauhinus*, *Marcius Banzerus*, *Petrus Morellus*, *Gerardus Blasius*, *Theodorus Schenckius*, *Wolfgangus Wedelius*, *Helfricus*, *Juncken*, *Michael Etmullerus*, &c. or even the very learned *Hieronymi Davidis Gaubii M. & Chem. L. B. P. Libellum de methodo concinnandi formulas medicamentorum.* (*Lug. Bat.* 1739. in 8vo.) which may supply the place of all who have treated on this subject; I say, without consulting these authors, any honest man, of common sense, cannot but know that he neither ought needlessly to waste his patient's substance nor protract his cure, nor give trouble or pain, nor endanger his life; that if he order *impermiscibilia* to be mixed, pills to be formed of fluids, an electuary to be made of solids without any addition, or any way transgress in pharmacy, he prostitutes his character, and becomes the jest of the shops. Vide *Gaub.* p. 1 ad 51.

And, on the other hand, whoever consults authors will find, even amongst the most famous, such a difference in the prescriptions for the same formula, that it is not easy to determine of what consistence it ought to be; though on the consistence the difference of formulæ chiefly depends. I might instance in iniments, unguents, cerats, &c. while juleps and mixtures, tablets and troches,

are confounded even in ſtandard pharmacopœiæ. *Vide* Julepum e Creta, & Tabellæ cardialgicæ, *Ph. Lond.* Tabellæ ſtibiatæ, Tab. de Rhabarbaro, *Ph. Paris.* p. 103. The *old* London diſpenſatories were in this more accurate, though the Committee ſeems to have looked on it as a trifle.

However *P. Gaubius* has been ſo full on this ſubject, that it is worth your while to peruſe him carefully, and to note down what you did not know before of any conſequence. To him I might refer you altogether, were there not ſome things, relative eſpecially to weights and meaſures, to doſes of ſimples and compounds, &c. not ſo fully handled by him, and very uſeful for you to know. I begin with weights.

SECT. II.

1. Pondera, or weights, go under the denomination of grana, ſcrupuli, drachmæ, unciæ, & libræ; the value of which every diſpenſatory explains, ſuppoſing the value of a grain known: which being arbitrary, it depends on the ſtandard kept by the magiſtrates, and fixed by the laws of every country. The medicinal grain in Britain is the ſame with that uſed by goldſmiths in weighing gold and ſilver; five of which make ſix French grains: ſo though the French ℈j. conſiſts of gr. xxiv. and ʒj. of gr. lxxii. yet their ℈ and ʒ are the ſame with our ℈ and ʒ. Of our grains 480 make an ounce, and twelve ounces the medicinal pound. But,

2. The common Engliſh weights, or averdupoiſe, uſed in commerce, differ from the medical: for the avoirdupoiſe ounce contains only 438 grains, and therefore wants of the medical or troy ounce 42 grains: while the avoirdupoiſe pound, conſiſting of 16 avoirdupoiſe ounces, and the medical of 12 troy ounces only, is lighter than the avoirdupoiſe pound by ʒiiß. gr. xlviij. as the avoirdupoiſe pound wants of the troy, or French and Dutch, pound of ℥xvj. ʒj. ʒiij. gr. xij. The medical pound in France was formerly ℥xij; that is the ſame with ours. Vide *Lem. Pharm.* p. 41. But now, according to the *Cod. Medicam. Edit.* 1748. it conſiſts of ℥xvj.

3. Although quantities of all ſorts of ſubſtances are moſt accurately determined by weights, yet for conveniency ſometimes liquids are ordered by drops or by meaſure. Thus ſome ſtrong oils, eſſences, tinctures, and volatile ſpirits, are preſcribed by drops. But drops varying, according to the ſpecific gravity and conſiſtence of the liquid, as well as the ſurface whence they fall, ſo that a drop from a large veſſel may be as weighty as two of the ſame liquid from a ſmall one, there is here leſs accuracy: but the ſmalleſt drops being equal to gr.ß. and the largeſt ſeldom exceeding gr. j. it is eaſy to adjuſt the doſe even thus with ſufficient ſafety.

4. The meaſures uſed in our ſhops are the cochleare, containing ſyrupi ʒß. vel aquæ ſtillat ʒiij. nearly; and the congius, containing ℔viij. that is of avoirdupoiſe ℔vj. ℥x. ʒiij. gr. iv. nearly; which deſerves to be conſidered both in preſcribing and diſpenſing more than it commonly is at preſent. But

In authors you will meet with four ſorts of cochleare, *viz.* cochleare maximum=ʒiv; cochleare magnum=ij, (aliis ʒiß); cochleare parvum=ʒj, (which I take to be the cochleare pulverum, *viz.* valerianæ ſylveſtris); and cochleare minimum,

minimum, equalling ʒß: Alſo a cyathus, containing ℥iß; and a ſextarius meaſure, which is the ſixth part of a congius, here equal to about ʒxvj; tho' the congius and ſextarius antiquorum were larger than ours.

" Vini menſuras adhibemus; & eam vocamus libram quæ lingua vernacula " appellatur *a wine pint*. Hanc libram hac ratione dividimus. Libra habet " ℥xvj; uncia ʒviij; congius habet lib. viij. Cochleare denotat menſuram " ʒß." *Ph. Lond.* p. 2. But their dry pound contains ℥xij. &c. as formerly. " Pondera, rejectis vulgaribus menſuris, manipulis nempe, pugillis, pintis, " &c. utpote nimium variabilibus, ſingula ad trutinam revocata ſunt. Gra- " num quod æquat pondus grani hordei modice craſſi. Scrupulus, qui pen- " det grana viginti quatuor. Drachma, quæ continet ſcrupulos tres: uncia, " quæ eſt drachmarum octo: libra, quæ complectitur uncias ſexdecim." *Cod. Medicam Pref.* Judge which is preferable.

5. Quantities are ſometimes defined by bulk, and at other times by number; which being very variable, or no ways fixed and certain, are juſtly laid aſide almoſt every where. Thus pugillus major is reckoned equal to ʒj; pugillus minor to ʒß; manipulus to ℥ß; and faſciculus is of no certain weight, being ſometimes a handful, and ſometimes an armful. As for Lupinus, nux pontica, nux myriſtica, and the like, often uſed to direct how much of an electuary is to be taken, when there is no danger in the quantity, they need no explication, though authors differ about them.

Fruits, bulbs, leaves, eggs, and inſects, are ſometimes directed by number; but this is always an uncertain way, and ſometimes very unſafe. Vide Cantharides. So that it is not to be recommended.

6. For the weights and meaſures of the ancients; *Stephani Blancardi Lexicon medicum renovatum*, &c. *Lugd. Bat.* 1717. in 8°. will ſufficiently explain them, as they occur in your ſtudies. And when you have time, you may conſult *Georgius Agricola*, *Conradus Geſnerus*, *Dominicus Maſſarias*, *Joannes Rhodius*, *Edvardus Bernardus*, (*De menſuris & ponderibus antiquis*, *Oxoniæ* 1688. *in* 8vo.) Dr. *Arbuthnot*, and twenty others on this ſubject, and ſee if you can exhauſt it. So much for weights and meaſures.

SECT. III.

I have given the doſe of the ſimples; and am now to enquire how the doſes of compounds are to be found; and how the doſes of ſimples, as well as of compounds, are to be proportioned to the circumſtances of particular patients, chiefly with regard to their age and conſtitution.

1. To find the doſe of any compound, when the quantity of each ingredient is ſpecified: what quantity of any of the ingredients is in any given quantity of ſuch a compound, what quantity of it contains a given quantity of any of the ingredients, and the like, are too puerile problems to be inſiſted on here. But how to inveſtigate the doſe of the compound, when either the weight of all the ingredients is not mentioned; or any of them not taken in ſubſtance, but in tincture or decoction, is of more conſequence. *Ex. gr.*

Quæritur 1. Doſis pil. cocciæ, ℞ Aloes, colocynthidis, ſcammonii āā ℥j, tartari vitriolati ʒij, olei caryophyllorum ʒj, ſyrupi de ſpina cervina q. ſ. ut F.

maſſa pilularis. Here are pulverum ℥iij; which, as will appear afterward, require an equal quantity of ſyrup to reduce them into a maſs of pills: but the ſalt and oil, rather diluting than thickening the ſyrup, ℥ij. ʒv. of it will ſuffice; and the maſs, well wrought, will weigh ℥vj. So the full doſe aloës being ʒj. colocynthidis gr. xv. & ſcammonii ℈j. erint in maſſæ ℥vj. doſes lxiv. (viz. doſes aloes 8. colocynthidis 32. & ſcammonii 24.): and maſſæ P. ℥vj. = ʒxlviij. = ℈cxliv. divided by the lxiv doſes, gives ℈iiß for a great doſe of this pill, and conſequently ʒß a good common doſe. *N.* There are in pilularum cocciæ ʒj aloes, colocynthidis, & ſcammonii āā. ℈ß. and not of each gr. xviij. according to Lem. Pharm. p. 300. nor gr. xiij. as it is in Shipton's Tab. poſog. p. 71. Neither are there in pil. de colocynthide cum aloe Ph. Lond. ʒj, aloes & ſcammonii gr. xvj, & colocynthidis gr. viij, as Dr. Pemberton calculates in his table annexed to the Diſpenſatory. It is true, the thickneſs of the ſyrup, and heat or coldneſs of the ſeaſon, &c. may alter a little the proportions: but that ſo much ſyrup was neceſſary was found by trial.

Quæritur 2. Doſis extracti *Rudii* (*Ph. Edinb.*) which is thus made: ℞ Radicis hellebori nigri, & colocynthidis āā. ℥ij, contuſis affunde aquæ fontanæ ℔iv. Coque ad medias, & colatura per pannum laneum trajecta exhalet ad ſpiſſitudinem mellis, adjiciendo in pulverem trit. aloës ſocotrinæ ℥ij, ſcammonii ℥j. Maſſæ ab igne remotæ immiſce tartari vitriolati ʒij, olei caryophyllorum ʒj.——Now, 1. There being here pulverum ℥iij, they will require the ſame quantity of the extract of the conſiſtence of honey, with the ſalt and oil, to bring the maſs to a due conſiſtence. In this quantity are 88 doſes (viz. hellebori nigri 16, colocynthidis 32, aloes 16, & ſcammonii 24.) and maſſa ℥vj, equal to 2880 grains, divided by 88 doſes gives $32\frac{8}{11}$ grains, which is a large doſe of this extract: for ʒj contains aloes ℈j, ſcammonii ℈ß, extracti liquidi hellebori nigri, ac colocynthidis āā. $12\frac{1}{2}$ grains nearly: which $12\frac{1}{2}$ grains is the extract of ℈j. of each of theſe two ingredients nearly; if there is no error in the above calculation. Neither *Lemery* nor *Shipton* have calculated how much of each of the ingredients is contained in a drachm of this extract. Was *Euſtachius Rudius* (*Utinenſis*) who wrote much, about the end of the ſixteenth century, the author of this compoſition?

2. This pill has long been much uſed, and very famous in England; tho' ſeveral times altered. At firſt it was a reſinous extract of colocynth, agaric, ſcammony, helleb. nig. turbith, and diarrhodon abbatis (a confuſed hotch-potch of above thirty ingredients) drawn with ſpirit of wine, (vide *Culp. Ph.* p. 142). Afterward diarrhodon was exchanged for ſome cinnamon, cloves, and mace, and the aloe and ſcammony were taken in ſubſtance, (vide *Ph. Lond. edit.* 1682. p. 217). Yet, it ſeems, the ſhops did not much regard the College; for we find it thus in Shipton: "℞ Coloc. ʒvj, agar. ſcammon. helleb. "nigri, turpet. āā ℥ß, aloes ℥j, cinnam. macis, caryoph. āā ℈ij. ſp. V. opt. "q. ſ. ut extrahatur tinctura, quæ exhaletur in maſſam, S. A." Which *Quincy* alſo follows, *Pharm.* p. 420. However the *Lond. Pharm. edit.* 1721. adheres to the receipt as in the former edition. But the Committee in 1746, after much commendation, diſmiſſed extractum rudii, and ſubſtituted an extractum catharticum in its place, *thus*, "℞ Aloes ſuccotrinæ ℥iß, medullæ "colocynth. ʒvj, ſcammonii, & ſeminum cardamomi minoris decorticatorum, "ſingulorum ℥ß, ſpiritus vinoſi tenuioris M. ℔j, colocynthidi minutim in-

" ciſæ, ſeminibuſque contuſis affuſo ſpiritu vinoſo, leni calore per quatriduum " macera, tincturæ expreſſæ adde aloen & ſcammonium ſeparatim in pulverem " redacta; his ſolutis, ſpiritum abſtrahe, & maſſam redige in pilularem craſſi- " tudinem." *Ph. Lond.* N. B. *Pembert. Diſpenſ.* p. 168. So here are pulverum ʒxvj, which will require at moſt but tinctura ʒxij, to bring to the conſiſtence, and make the maſs weigh ʒxxviij, containing ſixty moderate doſes. *Ergo* gr. xxviij doſis eſt extracti cathartici: of which ʒj will contain aloes gr. xxv, ſcammonii gr. viij, tincturamque gr. xiiß colocynthidis. This extractum catharticum is omitted in the " *Table for computing the doſes of compound purgatives*, &c." annexed to *Dr. Pemberton*'s *Diſpenſatory*.

While you have an opportunity in ſhops to ſee compound medicines prepared, you ought carefully to obſerve what proportion the excipient bears to the ſpecies, or other ingredients, by weighing them after they are made up. For thus you acquire the greateſt certainty as to their doſes, and will be able to judge whether the common poſologic tables are to be depended on. Vide *Gaub.* p. 92. γ.

SECT. IV.

But the greateſt difficulty remains, *viz.* how to increaſe or diminiſh the common doſe according as the age and conſtitution of particular perſons may require it. For that a child cannot ſafely take as much as a man, nor a weak perſon as much as a ſtrong, is evident. Several attempts have been made to ſolve this problem, but with what ſucceſs we ſhall preſently ſee.

1. *Dr. William Cockburn*, *M. D.* in 1705 favoured us with a ſolution of a problem he had given into the *R. S.* the year preceding; you have it *Phil. Tranſ.* No. 303. p. 2119. The title is, " Gul. Cockburn, M. D. ſolutio " problematis de purgantium & emeticorum medicamentorum doſibus deter- " minandis, in quacunque hominis ætate, temperamento, temperamenti varie- " tate, per univerſum terrarum orbem, ab ipſo menſe Martio proxime elapſo, " in actis philoſophicis propoſito." Here he aſſumes, 1. That ſuch medicines do not operate untill they are mixed with the blood, " ni nauſeam moveant." 2. That their common effect is " temperamenti liquorum gyrantium alteratio." Hence, 3. he infers that the doſes muſt be as the quantity of the blood, its craſis being the ſame: and 4. That the quantity of the blood is as the weight of the body; and conſequently the doſes muſt be " cæteris paribus, ut cor- " poris pondus. Exempli cauſa, Pil. rudii gr. xxx unica plerumque doſi ho- " mini exhibentur, & hominum pondus commune eſt 160 librarum, & infan- " tum recens natorum, librarum 12, quapropter, ut ſunt 160 : 12 : : 30 : $2\frac{1}{2}$ " doſin pro infante." 5. That the difference of conſtitutions is owing to the different degrees of the blood's coheſion, or fluidity; and therefore the doſes muſt be proportional to the blood's tenacity, the velocity being the ſame. 6. That the velocity being always, cæteris paribus, as the blood's fluidity, the quantity of the blood being the ſame, the doſe muſt be as the blood's tenacity multiplied by its velocity, or proportional to the ſquares of its tenacity. Whence he deduces this *theorem:* " Doſium quantitas, hominibus diverſæ quantitatis " ſanguinis exhibenda, qui ſimul diverſis pollet cohærentiæ gradibus, eſt in " ratione compoſita, ex ratione ponderis hominum, & duplicata graduum co- " hærentiæ."

" hærentiæ." And he ſays the ſame will hold, though medicines are ſuppoſed to act only by ſtimulating the ſtomach and inteſtines. But although all his data were granted, which however they cannot be, I believe his theorem would be of little uſe. Wherefore, to facilitate the practice,

In 1708 he gave the Society another paper, called " The practice of purging and vomiting medicines, according to *Dr. Cockburn*'s ſolution of his problem, with tables ſhewing their doſes in particular ages and conſtitutions." You have it in *Phil. Tranſ.* No. 314. p. 46. wherein, after reſuming what he thinks manifeſt from his ſolution, he adds: " The ages, wherein theſe " different doſes are taken, I find to be four: when a man is about ſixteen or " twenty years, and weighs about twelve ſtone, he then takes the common " doſe; (to fifty is in the ſolutio); one of nine years takes three fourths of it; " one of ſix takes half; and one of three years takes one fourth. Moreover " the notable healthy conſtitutions are but three, (*Œcon. Anim.* p. 51. *Bibl.* " *Anat.* Tom. II. p. 112. 4.) let them be as two, three, four; that of the " moſt fluid blood as the firſt number, and ſo on. In that caſe, the doſe for " any perſon will be found by multiplying the common doſe for his age into " the ſquare of his conſtitution, and dividing by the ſquare of the middle " conſtitution." And by this rule he calculates his tables; how juſtly I leave you to examine, ſince his foundation is merely hypothetical, and faulty at firſt ſight: it is therefore of no uſe. For if we grant his poſtulata, it is very eaſy without them to find the doſes. *Ex. gr.* If ʒij be a common doſe for an. 16, then ʒj will be a doſe for an. 6 middle conſtitution; ʒß for weakeſt conſtitution; and ʒiß for the ſtrongeſt conſtitution of the firſt age: which comes nearer the truth than his grains xxvj. $\frac{2}{3}$ of a grain for conſtitution two, and ʒiß $16\frac{1}{3}$ grains for conſtitution four. As in his tables: which are ſeven in number, but eaſily contracted into one.

In the *Medical Eſſays*, Vol. IV. Art. 5. is " An Eſſay towards aſcertaining the doſes of vomiting and purging medicines, by *Dr. Charles Balguy*, of *Peterborough*, Phyſician." He ſays Dr. Cockburn attempted this ſome time ſince; " but, as he went upon a wrong principle, he muſt needs be miſtaken in his " conſequences." But, ſo far as I can ſee, he has neither gone on better principles, nor ſhewn more knowledge of medicines. . . . . Which probably occaſioned the compliment payed them by *Dr. T. R.* (in his cure for . . . tar-water, printed 1744.) " Hence, my Lord, ſays he, it appears, that your " reaſoning about this chimerical doctrine not only ſeems but is chimerical. " It is of the ſame kind as that employed by ſome wrong-headed doctors " among the ancients;" (Alkindus is mentioned, a very modern ancient, if of the twelfth century) " and revived by others, no leſs ſo, among the mo- " derns, (*Phil. Tranſ.* No. 293. and *Med. Eſſ.* Vol. IV.) to prove the doſes " of purging medicines ought to be determined by mathematical rules, " ſometimes as the ſize into the conſtitution, and at others as the ſize into " the ſquare of the conſtitution."

2. In " *Theodori Balthaſaris, M. D.* De doſibus medicamentorum diatribe, qua illæ juxta medicinæ practicæ pariter ac matheſios principia expenduntur," (Erlangæ 1719. in 8vo.) the cap. 6. is " *Quomodo doſes reſpectu ætatum va-* " *riandæ & his accomodandæ ſint.*" Here he obſerves, 1. That doſes ought to be proportioned to the vires corporis. 2. That the vires corporis increaſe

from the beginning of life till one arrives at full vigour, continue the ſame for ſome time, and then gradually decreaſe. 3. That this virium augmentum is not proportional to the age arithmetically: "ſed vires & robur corporis, quo "propius ortui, eo velocius creſcunt, & poſt conſiſtentem ætatem, paulatim "decreſcunt, tardius primo, deinceps velocius;" and conſequently the doſes muſt keep the ſame progreſſion. 4. That a man arrives at full ſtrength and vigour at forty, continues much the ſame to fifty, after which jactura virium evidens magis evadit. And 5. That if a curve line could be found, whereof the applicatæ increaſe in length, at firſt faſter, then more ſlowly, and when come to the longeſt, or poſt maximam applicatam, again by little and little decreaſe; while the axis abſciſſæ keep the progreſſion of natural numbers (or are equal) ſuch applicatæ would conveniently expreſs the vires corporis, and conſequently the doſes medicamentorum, for the different ages ſignified by the abſciſſæ. Then he proceeds to inveſtigate his curve, and, when found, calls it an oſtroide, or linea doſium; whence he deduces a general theorem for finding the proper doſe of any medicine for every age, the full doſe being given; by it calculates long tables; and contrives, deſcribes and figures a balance, by which the doſes may be not only eaſily found, but alſo moſt expeditiouſly and accurately diſpenſed, or weighed out.

In theſe tables, which fill eight pages, you have the doſes of medicines, whereof the full doſe is gr. x. gr. xv. ℈j. ʒß. ℈ij. ʒj. or ʒij. for every year of one's age, from 1 to 100. (after which few take drugs); and that not only in grains, but even to the 1000th part of a grain. If nature did not admit of a greater latitude than our author does, there would be few phyſicians. However, the tables may eaſily be brought into very ſmall bounds. Here *Balthaſar* has the advantage of *Cockburn*, in that none of his poſtulata can be denied, if we add only to the fifth after decreaſe *ut vires corporis*. For here only lies the defect. The ratio of the increaſe and decreaſe of the vires corporis ought firſt to have been inveſtigated; it being ſomewhat prepoſterous to determine the vires by a variable curve, which ought to have been, were there occaſion for it, proportioned to the vires, or the length of its applicates determined by them. This our author ſeems to have been aware of, when he ſays: "Licet vero demonſtratione mathematica evincere nequeam vires "præciſè hac, non alia ratione creſcere & decreſcere ſufficit tamen eam quam "proximè reſpondere obſervationi & experientiæ." p. 154. And certainly by his method the ratio doſium comes nearer to the ratio virium than by D. Cockburn's, in which the doſe for one of ſix years is double, and for one of nine treble, to that of one of three; whoſe numbers, both of age and conſtitution, ſeem to have been pitched on merely for the conveniency of eaſy calculation. Is one as ſtrong at ſixteen as at twenty?

By comparing the tables of theſe two learned gentlemen, it appears alſo, 1. That *Dr. C.* gives the doſes for four years of one's life; *Dr. B.* for every year to 100. And 2. That they differ conſiderably in the doſe proper for the ſame age. Thus of any medicine, "cujus doſis communis eſt ʒij." to one of three years *Dr. C.* gives gr. xxx, *Dr. B.* gr. xxxj; to one of ſix *Dr. C.* gives ʒj, *Dr. B.* gr. liv; to one of nine *Dr. C.* gives ʒiß, *Dr. B.* ʒj. gr. xij; to one of ſixteen years *Dr. C.* gives ʒij, *Dr. B.* ʒiß. gr. viij, which is but eight grains more than *Dr. C.* orders for one nine years old. Surely nature allows of a very

very great latitude in doſing, if both theſe tables are founded on experience, as both the doctors pretend: to which however *Dr. Balthaſar* has evidently the better claim. But,

3. Let us hear *Profeſſor Gaubius.* " In doſi dua ſpectanda veniunt, moles " nimirum atque numerus. Molem determinant variæ tam ægri quam medi- " camenti adhibendi conditiones. . . Hinc attendendum (α) ad morbi naturam " . . . (β) ad vires vitæ . . . (γ) ætatis deinde ratio habenda. Quocirca ſe- " quentes fere obtinent generales regulæ, quoad remedia interna. (vide *Junc-* " *keri Conſp. Form.* p. 4.) Pone doſin efficacem eſſe pro homine conſiſtentis " ætatis . . . . . 1 vel ʒj.

Erit pro ann. xiv. ad xxi.	$\frac{2}{3}$ vel ℈ij.	$\frac{3}{4}$	ſecundum Balthaſar.
vii. ad xiv.	$\frac{1}{2}$ vel ʒß.	$\frac{1}{2}$	
iv. ad vii.	$\frac{1}{3}$ vel ℈j.	$\frac{1}{3}$	
iv.	$\frac{1}{4}$ vel gr. xv.	$\frac{1}{3}$	
iii.	$\frac{1}{6}$ vel ℈ß.	$\frac{1}{4}$	
ii.	$\frac{1}{8}$ vel gr. viij.	$\frac{1}{6}$	
i.	$\frac{1}{12}$ vel gr. v.	$\frac{1}{11}$	

" Senes bis pueri, ut viribus & victu, ſic & medicamentis: unde in his ſexa- " genarium cum Juvene tertii ſeptennii; ſeptuagenarium cum adoleſcente ſe- " cundi; octuagenarium cum puero primi, & ſic porro comparare forſan licet. " Neque tamen adeo hæc conſtanter obtinent, quin multas ferant exceptio- " nes; prout facile patet diverſos ejuſdem ætatis homines, ratione virium, inter " ſe conferenti. Quare ex ætate ſola, vix recte calculum poſueris." Vide *G. De methodo concinandi formulas*, p. 24, &c. where is ſhewn what regard is to be had to the moles corporis, temperies, ſexus, diſpoſitio, idioſyncraſia, conſuetudo, vitæ genus, nationes, anni tempus; remedii efficacia, pretium, levitas, injucunditas, formula, & uſus.

But it does not appear, either from *Juncker* (*Con. ſp. form. halæ Magdeburgicæ* 1730. in 4to, p. 112.) nor from *Gaubius*, on what principles theſe proportions are founded. If on experience only, they differ much from Balthaſar in ſome ages, agreeing in others, as in p. 567. Beſides, he makes the doſe ab an. 14. ad 21. the ſame: alſo ab an. 7. ad 14. and ab an. 4. ad 7. So that the doſe ab an. 14. is $\frac{1}{2}$, but an. 15. $\frac{2}{3}$, and an. 21. no more, which is not very accurate. *Vide* his three following articles or regulæ: which would have been more diſtinct, had he begun where he ends thus: " Erit pro an. 1. . . . $\frac{1}{12}$, vel a " nativitate ad an. 1. & ſic de cæteris." I need not obſerve to you in what particulars *Gaubius* differs from *Cockburn:* they ſcarcely agree in any thing.

SECT. V.

Let us now ſee if this problem is capable of a ſufficiently (at leaſt of a more) accurate ſolution; taking experience for our guide. In order to which let it be obſerved:

1. That we commonly increaſe in ſize and in ſtrength from our nativity to the 29th year of our age, continue much the ſame to 50, and begin and continue to decreaſe to 70, 77, or 84, the common periods of old men. —

2. That

2. That neither our increaſe nor decreaſe is proportional to the number of our years: nor can either be expreſſed by the applicates of any imaginable curve. For—3. Although our increaſe is (cæteris paribus) greater the firſt year, in proportion to our bulk, than the ſecond; the firſt month than the ſecond; yet neither is this increaſe reciprocally proportional to our age; nor are we always from our birth to our full vigour continually increaſing: both ſtrength and bulk are now and then at a ſtand for ſome time, and then again increaſe faſter than they did before, and ſo on. And thus we come to full vigour per ſaltus, or ſteps, as it were; our increaſe being better repreſented by a pair of ſtairs, or a ladder, than by a curve. Hence it is that phyſicians, having obſerved certain periods of time wherein we undergo commonly remarkable changes either to the better or the worſe, have called them clymacteras, from κλιμαξ, ſcala, a ladder, ſtile, or an aſcending by ſteps or degrees. And no period having been ſo much remarked as that of ſeven years, every ſeventh year has been called a climacter, climactera, or climacteric year. In *Vander Linden's Hippocrates*, Vol. I. p. 314. there is inſerted *Hippocratis de ætate fragmentum ex Philanis Indæi de Opificio Mundi*, p. 24. which runs thus in Latin: "Hippo-"crates medicus ait ſeptem eſſe ætates, infantes, pueri, adoleſcentis, juvenis, "viri, ſenioris, ſenis. Has autem menſurari hebdomadis, quanquam non "ultimis. Ait autem, in hominis natura ſunt ſeptem tempora quas ætates "vocant, infans, puer, adoleſcens, juvenis, vir, ſenior, ſenex. Infans eſt "uſque ad ſeptem annos, dentium amiſſionem. Puer vero uſque ad genituræ "ortum, ad bis ſeptem. Adoleſcens uſque ad barbæ lanuginem, ad ter ſep-"tem. Juvenis uſque ad auctionem totius corporis, ad quater ſeptem. Vir "uſque ad undequinquageſimum, ad ſepties ſeptem. Senior uſque ad quin-"quaginta ſex, ad ſepties octo. Deinceps vero ſenex eſt." Thus *Hipp.* or *Philo.* Beſides, in women, "ad bis ſeptem annos erumpunt menſes vulgò, "ad ſepties ſeptem fluere deſinunt vulgò." And in children dentition generally begins in ſeven months. *Hoffman* ſays, "Lumbrici circa ſeptimum an-"num uberius ſeſe exſerunt. . . Vigeſimo primo & vigeſimo octavo accedente, "fœminæ fiunt multum ſalaces; & amatoriis febribus corripiuntur." Vide *Diſſertatio de Annorum Climactericorum rationale & medica explicatione. Lugd. Bat.* 1713. in 8vo, where you have a great deal more on this ſubject: as you have alſo in *D. And. Elias Buchneri Diſquiſitio medica-phyſico de veris effectibus annorum climactericorum in corpus humanum, illorumque cauſis*, in the Appendix to the Vol. VI. *Act. Phyſico-medica*, &c. *Norimb.* 1742. a p. 149—158.

Now, as it is evident that a child increaſes in ſtrength faſter before dentition than during the time of it; ſo alſo faſter after it is over; faſter after caſting the teeth than before; faſter after puberty than before, &c. it muſt follow "vires quo propius ortui, eo velocius creſcere," is not ſtrictly true. Though we cannot ſtrictly determine in what proportion they increaſe at ſuch periods (to which perhaps their increaſe of bulk or weight, if we knew it, might conſiderably aſſiſt us); yet it ſeems reaſonable to have ſome regard to them in adjuſting the doſes for different ages; but ſo far only as they are countenanced by experience; which of itſelf would be ſufficient, if practical authors agreed. But we ſeldom find any one author keep always the ſame proportion of the different medicines preſcribed by him for the ſame age. Thus even the great *Boerhaave*, for an infant retaining too long the meconium, preſcribes in one

receipt $\frac{1}{15}$, in another $\frac{1}{13}$, in a third $\frac{1}{12}$, in a fourth $\frac{1}{7}$ part of the common doſe, of mild cathartics; *Lib. de M. M.* As *Wedelius* does ſometimes $\frac{1}{15}$, at other times $\frac{1}{10}$, yea $\frac{1}{8}$, even of a ſtrong cathartic. "Notandum, ſays he, "infantes facillimè ferre purgantia, & ipſa etiam correctiora emetica. Dedi "ſæpius infantibus duorum vel trium ſaltem dierum Gialapium ad gr. ij, iij, "& iv. feliciſſimo cum ſucceſſu; hoc modo & ſomnum concilians inquietis, "& humores leniter educens; quod ipſum a variis ſymptomatibus eos pre- "ſervat. Et, quod majus eſt, certiſſimum eſt infantes hæc ipſa purgantia, "reſpective & proportionaliter, longe commodius & in majori doſi, quam "adultos ferre." Vide *Opiolog.* p. 38. Now, it being ſafer to give too little than to give too much,

(α) We may fix on the fifteenth part of the common doſe, as the proper doſe for an infant from its nativity until it be ſeven weeks old; and from ſeven to fourteen weeks $\frac{1}{14}$ doſis communis; and from fourteen to twenty-one weeks $\frac{1}{13}$. (β) Since for one of a year old *Balthaſar*'s doſe is about $\frac{1}{11}$, *Gaubius*'s $\frac{1}{12}$, which is exceeded by *Boerhaave* and *Wedelius:* the doſe for a child from twenty-one to twenty-eight weeks, or to ſeven months, may be $\frac{1}{12}$ doſis communis; and thence to fourteen months $\frac{1}{10}$. Though *Harris* (*De Morbis Infantum*) gives ſometimes $\frac{1}{8}$, ſometimes $\frac{1}{6}$ and more, to a child unius anni, that is, I ſuppoſe, from one to two years. (γ) For a two-year-old child *Balthaſar* giving $\frac{1}{6}$, and *Gaubius* $\frac{1}{8}$, the doſe from fourteen to twenty-eight months may be $\frac{1}{8}$, and thence to forty-two months, or three years and a half, may be $\frac{1}{6}$ doſis communis, which is *Gaubius*'s doſe for one of three years; though *Balthaſar* gives $\frac{1}{4}$. And (δ) thus, by comparing authors, you will find the proper doſe for one from three and a half to ſeven to be $\frac{1}{4}$, to fourteen years $\frac{1}{2}$, to twenty-one years $\frac{3}{4}$, from that time to fifty-ſix years the full common doſe, from thence to ſeventy years $\frac{9}{10}$, to eighty-four $\frac{8}{10}$, to ninety-one $\frac{7}{10}$, to ninety-eight $\frac{6}{10}$, to 105 $\frac{5}{10}$, or $\frac{1}{2}$. But,

2. As there are ſeveral circumſtances of particular perſons, ariſing from cuſtom, diet, diſeaſe, or the like, which may make the variation of the doſe for their age neceſſary; ſo they may be comprehended under the general name conſtitution, or *idioſyncraſia*, by which I underſtand the diſpoſition which any perſon has to be more eaſily or more difficultly moved by medicines than commonly perſons have of the ſame age: which may be generally diſcovered by his way of living, as to diet, exerciſe, &c. the effect of medicines formerly taken; the ſtructure of his body; nature of his diſeaſe; and the like. *Dr. Balthaſar* employs near twenty pages in demonſtrating a ſelf-evident truth, *viz.* that if the ſqueamiſhneſs of a perſon in the dyſentery be ſuch as to double the efficacy of an emetic, half a doſe will operate as well as otherwiſe a whole doſe would have done. But at the ſame time it muſt be acknowledged, that conſtitutions are ſo various, that no general rule can be given for thereby regulating doſes, otherwiſe than by reducing the conſtitutions into claſſes, as *Dr. C.* has done; or, according to the proportion which the weakeſt conſtitution bears to the ſtrongeſt, proportioning their doſes; which is much the ſame.

Dr. Cockburn ſuppoſes the conſtitutions to be as two, three, and four: but (were it not for his ſquares) one, two, three, would do as well; which, I think, may ſafely be admitted. For in authors the full doſe of any medicine is not a determined quantity, or certain number of grains for inſtance; but from ſuch

a quantity to ſuch a quantity; as from ℈ß to 3ß; from ʒj to ʒiij, &c. thereby denoting the largeſt as well as ſmalleſt full doſe: the mean betwixt them being the common one; while the largeſt is moſt commonly triple the ſmalleſt; or at leaſt there are as many above as below this proportion. See *S. Pauli Doſes Medicamentorum*, annexed to his *Quad. Botanicum*; and *Catharticorum Simpl. Doſes*, in the end of the *Pharm. Bateana*, *edit.* 1691. In which laſt the Doſis Elaterii is gr. j, ij, iij; Scammonii gr. vj, xij, ℈j. (for xviij gr.) Gratiolæ & Sem. Ebuli ℈j, ℈ij, ℈iij; Gambogiæ ℈ß, ℈j, 3ß; Lapid. Lazuli & Armeni 3ß, 3j, 3iß; Hermodactyli ℈ij, ℈iv, 3ij; Mannæ ac Tamarindi ʒj, ʒij, ʒiij. And if theſe are rightly proportioned, the reſt ſhould be ſo too. Thus the doſe of Aloes ſhould be 3ß, 3j, 3iß, (not ℈j, 3j, 3ij); of Colocynth gr. vj, xij, xviij, (not gr. vj, ℈ß, ℈j); of Jalap 3ß, 3j, 3iß, (rather gr. xv, 3ß, gr. xlv, not ℈j, 3j, ℈iv, as in our author); and ſo of others. For I do not ſee why what is a juſt proportion in one cathartic ought not to be ſo in all. And therefore the half of a common doſe is a ſufficient doſe for the weakeſt conſtitution, and two-thirds for the ſtrongeſt.

It muſt however be owned, that authors, in this reſpect, are often as little conſiſtent with themſelves as with one another. *Ex. gr.* Doſis Aloes eſt à 3ß. ad ʒiij. (*i. e.* à 1 to 6.) *Sennerto*; à 3iß ad ʒiij, *Fernelio*; à 3j ad ʒiiß, *Morello*; à 3j. ad ʒij, *Horſtio*; à 3j ad 3iß, *Duncano*, &c. Doſis Scammonii eſt à gr. v ad gr. x vel xv, (*i. e.* ab 1 ad 2 vel 3), *Sennerto*; à gr vj ad x, *Fernelio*; à gr. vj ad xv vel ℈j, *Morello*; à gr. vj ad xij, *Duncano*. . . . Colocynthidis à gr. vij ad xv, *Horſtio*; a ℈j ad 3ß, *Fernelio*, &c. Rhabarbari doſis eſt a ʒj ad ʒij, *Sennerto*. And ſo of others. As if ſimples might be doſed at random, we find the ſmalleſt full doſe to the greateſt as 1 : 2. 1 : 3. 1 : 4. 1 : to 6, &c. This ſeems to be taking a greater latitude than nature allows of.

Doſium ratio ætatum reſpectu, *ex. gr.* Rhabarbari, *quod datur à* ʒj *ad* ʒij *vulgò*; *ab ortu vero ad hebd.* 7, *&c. ut ſequitur:*

Æt. ab ortu ad	Doſes propriæ	Rhabarbari	Æt. ab an. vii. ad	Doſis propriæ	Rhabarbari
Hebdom. 7	Com. pars $\frac{1}{15}$	Gr. iv. adviij.	Annum 14	Com. pars $\frac{1}{2}$	Gr. xxx. ʒj.
Hebd. 14	Com. . . $\frac{1}{14}$	Gr. ivß. . ix.	Annum 21	Com. . . . $\frac{2}{3}$	℈ij. . . . ℈iv.
Hebd. 21	Com. . . $\frac{1}{13}$	Gr. iv$\frac{2}{3}$. ix$\frac{1}{2}$	Annum 28	Com. . . . $\frac{3}{4}$	Gr. xlv. xc.
Hebd. 28	Com. . . $\frac{1}{12}$	Com. v. . x.	Annum 56	Com. doſis	ʒj. . . . . ʒij.
Menſem 14	Com. . . $\frac{1}{10}$	Gr. vi. . xii.	Annum 70	Com. . . $\frac{9}{10}$	Gr. liv. cviii.
Menſem 28	Com. . . $\frac{1}{8}$	Gr. viiß. xv.	Annum 84	Com. . . $\frac{8}{10}$	Gr. 48. . 96.
Menſem 42	Com. . . $\frac{1}{6}$	Gr. x. . ℈j.	Annum 91	Com. . . $\frac{7}{10}$	Gr. 42. . 84.
Annum 7	Com. . . $\frac{1}{4}$	Gr. xv. 3ß.	Annum 98	Com. . . $\frac{6}{10}$	Gr. 36. . 72.

But to conclude this article, when there happens to be danger in the defect, as well as in the exceſs, and you cannot determine what quantity will prove a ſufficient doſe; divide the doſe for the patient's age into three or four parts, and give them at proper intervals, till they anſwer your intention: *Et hæc ſit regula generalis.* What is ſaid of doſes is not to be reſtricted to cathartics and emetics; but concerns medicines in general, even when the doſe is determined more by the bulk of the ſubſtance than by its efficacy; yea and when injected per anum as well as when taken by the mouth: *Ex. gr.* Pul. ſtanni doſis

communis eſt ℥ij, and conſequently ʒß for one of ſeven years old. Clyſteris doſis communis eſt ℔j: ergo ℥iij are enough for a child of the former age, though of a vigorous conſtitution. *N. B.* 1. That the doſe of the ſimples, given in the above lectures, is the full doſe for one of the ſtrongeſt conſtitutution. *N. B.* 2. That although I have made the conſtitutions to be as one, two, three, yet, conſidering the allowable latitude in ſuch caſes, there can be little danger in making the doſe for the ſtrongeſt conſtitution only double that for the weakeſt; or that for the weakeſt to be only half the doſe of that for the ſtrongeſt conſtitution. Thus if jalapæ ʒß purge the one, the other may ſafely take gr. xv. So the conſtitutions will be as *Dr. Cockburn* makes them, as 2, 3, 4. Thus much for doſes.—Proceed we now to conſider formulas themſelves.

SECT. VI.

The ſum of what I have to ſay of formulas in general comes to this: In preſcribing there ought to be no inconſiſtency in the directions, nor incongruity among the ingredients; no occaſion of miſtake given to the diſpenſor, nor unneceſſary trouble; and nothing omitted that can any way contribute to the rendering the preſcription as ſafe, efficacious, and agreeable to the patient as the preſcriber can poſſibly make it.

Hence in preſcribing, 1. when both liquids and ſolids enter the receipt, they muſt be ſo proportioned, as to be, when mixed, of the deſigned conſiſtence. (α) This requires the knowledge of menſtrua, or how bodies act on one another, and what is neceſſary to their union. You know that ſaline, gummy, mucilaginous ſubſtances require aqueous menſtruums; but oils, balſalms, roſins, can be diſſolved only by ſpirits, alcali, ſalts, yolks of eggs. But it is not ſo commonly known that camphora diſſolves in a manner reſinous gums, as aſſa fœtida, with which, in any conſiderable quantity, it cannot with powders be reduced into pills: that liquid balſams require the aſſiſtance of heat to bring them to that formula with powders: that jalap, opium, and the like, diſſolve better in proof than in rectified ſpirits, &c. (β) Nothing ſuperfluous either as to quantity or quality, nothing that will render the medicine unneceſſarily nauſeous, ſhould enter receipts: as coloured ſyrups in emulſions, vegetable aſtringents in chalybeate liquids, mucilages in juleps, &c. And (γ) Nothing which deſtroys the nature of the chief ingredient; as acids with abſorbents, when an antacid is wanted. "Scammonium acidi miſcela reddit "arenæ inſtar, inertiſſimum; alcali fixum contra adjuvat. Jalapam & colo-"cynthidem fere cicurat penitus ſal tartari." *Gaubius*, p. 48. (δ) Though this is to be underſtood cum grano ſalis. *Vide* quæ § 102, 103, 104, habet.

2. To prevent miſtakes, ſhun all unuſual even though medical names, all abbreviations or nuncupationum genera, and chemical characters: even theſe uſual characters, ℥, ʒ, ℈, may occaſion fatal miſtakes. And where there is danger, the direction how the medicine is to be taken ſhould be in Engliſh. In a receipt for one in the country I wrote once *capiat* ℥ij. *omni quadrihorio*, and the apothecary explained it every quarter of an hour. You may try one another's knowledge of the names, nuncupationum genera, characters, &c. but riſk not your patient's ſafety for a trial of the apothecary's ſkill. Farther, let every thing be diſtinctly and orderly written: For,

3. Every

3. Every regular preſcription ought to conſiſt of eight parts, *viz.* 1. The order (which *Gaubius* calls the initium) ℞ or ℥, Recipe. 2. The ingredients in order, with their quantities. 3. The form they are to be of, and how they are to be reduced into it. 4. The time and manner of giving the medicine. 5. The ſignature, or how it is to be named. 6. The patient's name for whom it is deſigned. 7. The date. 8. The phyſician's ſubſcription.— As for the formularum partes quatuor, *viz.* baſis, adjuvans, corrigens, & conſtituens, though inſiſted on by many, I think it an improper diviſion, few formulas containing them. A baſis cannot be wanted; and a conſtituens is ſometimes neceſſary: but the other two are frequently uſeleſs, and often prejudicial. However you may ſee *Gaubius* on this head, à § 74 ad 91. Let this ſuffice as to formulas in general: I ſhall now conſider them in particular.

SECT. VII.

The formulas commonly in uſe in extemporaneous preſcriptions are *pulveres*, *electuaria*, *pilulæ*, *trochiſci*, *tabellæ*, *mixturæ*, *julapia*, *emulſiones*, *infuſa*, *decocta*, *cataplaſmata*, *linimenta*, *unguenta*, *cerata*, and *emplaſtra*. Were I only to give you an abridgment of what authors have written on the firſt and even moſt ſimple formula, it would take more time than what I have allotted for the lecture; and yet perhaps I ſhould ſay little which you know not already. I ſhall therefore be very ſhort: for with relation to

1. *Powders*; need I tell you what a pulvis is; what the materia pulverum; that there are pulveres craſſi, ſubtiles, & ſubtiliſſimi; that they are uſed outwardly as well as inwardly; how they are to be taken; that they are ordered for one or more doſes; that ſome are called eye-powders, or collyria ſicca; teeth-powders, or pulveres dentifricii; hair-powders, pulveres cyprei; ſnuff-powders, errhina, or ptarmica; topical powders, as for cucuphæ, frontalia, ſcuta, ſacculi, and the like? No. Neither ſhall I trouble you with recipes: you have enough of them in *Gaubius*.

Only, tyronum gratia, let me obſerve: (α) That ſoft and even liquid ſubſtances may be powdered, by adding ſ. q. of ſuch as are dry. Thus Mercurii p. ii. with ſulph. p. i. or oc. canc. aut ſacch. p. iv. forms a powder: and olei, aut balſami p. i. with ſacchari p. vi. vel viii. are reduced into balſamo-ſacchara, and elæoſacchara. (β) The quantity to be taken at a time (if unpleaſant) cannot well exceed ʒj: ϑj is commonly enough. If it be taken in a wafer (in libo, called elſewhere, leſs properly, nebulæ, & oblatum, but more properly by *Boerhaave*, ollati involucrum) it ought firſt to be moiſtened with ſome ſyrup or other liquid, that it burſt not in the throat in ſwallowing. And (γ) if ſubſtances of very different efficacy are conjoined in a receipt, to be taken at ſeveral times, it is ſafeſt to order them to be made up into ſeparate doſes: *ex gr.* ℞ Ipecac. p. ϑß. turbith mineral gr. ij. (or jalap. pulv. ϑj. elater. gr. j.) pro una doſi; & ſic F. doſes duæ, tres, &c. As to prevent loſs, when a very ſmall quantity of a ſtrong medicine is to be given in a paper, it is proper to mix with it ſome innocent powder, as pulv. glycyrrhizæ, ſacchari, elæoſacchari, by which alſo its taſte may be improved or varied at pleaſure, and little or nothing of it ſtick to the cover. I hope every one knows the inſtruments for trituration;

trituration, wood, marble, metal and glaſs mortars, porphyries; when and how to uſe each; and the uſe of water in levigating hard and gritty ſubſtances. On this ſubject you may conſult *Gaubius* à p. 52 ad 66, à p. 218 ad 222, à p. 234 ad 244, and in many other places.

2. *Electuaria.* "Electuarium, ab electione rerum quibus conficitur dictum; "an Electuary." *Cambridge Diction.* "The term Electarium has of late "been moſt generally written Electuarium; but here is choſen the ortho- "graphy of *Cælius Aurelianus*, the moſt ancient author we have, who uſes "the word." *Pembert. Diſp.* p. 333. An Electuary or Electary, as you will, goes under many other names, as Antidotus, Confectio, Mithridatium, Diaſcordium, Opiatum, Orvietanum, Philonium, Requies, Theriaca, &c. which are all Electuaries; as was ἐκλικτον, frequently uſed in *Hippocrates.*

(α) All ſorts of ſubſtances may be made into Electuaries; liquids wanting only a due proportion of ſolids, and ſolids of liquids, to bring them to the conſiſtence: yet acids with alcalies or abſorbents, ſulphur with limatura ferri, do not well agree. "Deliqueſcentia, exhalantia, putreſcentia, efferveſcentia, facilè fermentantia aut aceſcentia, hic minus conveniunt." *Gaubius*, p. 75. (β) Of common vegetable powders p. i. requires ſyrupi, vel mellis deſpumati, p. iii. or, if the powder be very light, p. iv. to bring them to this form: or vini, vel aquæ, p. ii. plus minus. (γ) The doſe may be ʒj, and cannot well exceed ʒij, to be taken *per ſe* in a proper liquid, or in a wafer, as is moſt convenient. (δ) If one doſe of an Electuary be only preſcribed, it is called Bolus: or a Bolus is a ſmall Electuary to be taken at once.

Loch, *lohoch*, *linctus*, λειγματα, vel ἐκλειγματα, are of a conſiſtence between ſyrups and electuaries. They are taken *per ſe*, and ſlowly ſwallowed; ſo ought to be very palatable, and made chiefly of ſuch ingredients as melt in the mouth; as of ſugar, honey, ſweet juices and oils, or the like. Hence gum ammoniac, helenium, thlaſpi, capivi, & ſimilia, are not very proper. If powders are added, they ought to be very ſubtile, and not exceed the one-fifth part of the whole. Their uſe determines the quantity to be made at a time.

3. *Pilulæ*, or *Catapotia*, (for the ancient names of which ſee *Le Clerc's Hiſt.* p. 604.) are the moſt convenient form for all exceſſively bitter, acrid, nauſeous, gritty ſubſtances, except fixed and volatile alcalies, which run p. d. or evaporate in the common air. (α) The maſs into which they are formed differs from electuaries in conſiſtence, and commonly alſo in tenacity. Hence reſinous gums, roſins, if not friable, concreted juices, extracts, are *per ſe*, or aſſiſted by heat, capable of this form. (β) Vegetable powders, and ſuch like, with an equal quantity of a ſyrup, well wrought, becomes a maſs of pills. If you weigh the full quantity ordered in the *Diſp.* of the Pil. Cocciæ, you will find it about ʒvj. But of ſpirit or water one half will ſuffice. "Poſita ex- "cipiendorum pulverulentorum ʒj, excipientis ſpiſſi, ut mellis, terebinthinæ, "&c. ʒv ad vj; minus ſpiſſi, ut ſyrupi, vitelli ovi, balſami, &c. ʒiij ad iv; "liquidioris, ut eſſentiæ, elixir, tincturæ, ſpiritus, &c. ʒij ad ʒiij opus eſt, "ut obtineatur juſta Pilulæ ſpiſſitudo." *Gaubius*, p. 92. Though I think the proportions of the excipient too ſmall. For farinæ avenæ ʒj requires aquæ ʒß to bring it to a paſte of the conſiſtence of a maſs of Pills. But ſtill regard muſt be had to the ſpecific gravity of the ſpecies. *Fiantque experimenta.* (γ) Pilulæ, N° xii. made from ʒj of the maſs, are of the common

ſize

ſize here: and they need not be leſs than of gr. i. weight. " Si quantitas " pondere determinanda ſit, non facile majores Pilulæ pendeant ultra gr. ij, " mediæ ultra gr. j, minores gr.ß." Vide *Wedel. De comp. med. extemp.* p. 115. " Moles cujuſvis Pilulæ hodie quam olim minor, haud tamen ubivis eadem, " aliis ægris, medicis, nationibus alia arridet. Major eſt, ſi maſſæ gr. viij " vel x conſtat, Anglis tamen & Gallis uſitatiſſima, imo vel hac quoque gran- " dior. Mediocrem dant gr. ij ad v, quæ inter Belgas fere recepta eſt. Mi- " nima gr. j. Germani amant, quorum nonnullis hæc etiam major viſa, non- " niſi in ij, iij, vel iv, decerpta pilulas demum placet." *Gaubius*, § 164. p. 89. Surely Dutch throats are as wide as any. (δ) The quantity to be taken at a time is ʒß commonly: and ʒj is ſeldom exceeded. (*N. B.* Pilulæ de ſapone.) " Pondus pro una doſi, non facile excedat ℈j." *Balthaſ.* p. 92. " Doſis quo " minor, eo fere gratior, modo efficax ſit; ut ideo defectu peccari huc vix " queat: ℈j ad ʒß. commode ingeritur ſimul. Ad ℈ij, vel ʒj, raro adſcendi- " tur, niſi indicatione urgente, materie ſpecifice graviore, ægro facile." *Gau- bius*, § 165. p. 90. For the delicate they may be gilded.

4. *Trochiſci*, *paſtilli*, *troches*, are only powders, &c. made into a paſte with ſuch liquids as will make them cohere, formed into little cakes or balls, and dried in order to preſerve theſe powders from ſpoiling, have them ready for uſe when wanted, or for convenience in uſing them. (α) " Trochiſcus (in- " ternus), paſtillus, eſt pilula, non globoſa, quæ non integra, ſed inſtar ecleg- " matis, ſenſim in ore diſſoluta, deglutitur: ut hinc eclegma ſolidum fere " dixeris." *Gaubius*, p. 98. (β) If the ſolids are farinaceous, gummy, or viſcous in nature, any water, wine, or juice ſuffices: if not, by gums, ſyrups, ſugars, mucilages, they are eaſily made ſo. Gum tragacanth is much uſed in troches for inward uſe. (γ) The figure and ſize is arbitrary; but commonly round and flat, and of ʒj, ʒiß, or ʒij weight, and ſealed if you pleaſe. But they may be as ſmall as pills, and are ſometimes called orbiculi & farinæ lu- pinares. (δ) They differ from plaiſters, as not made of oils, or reſinous ſub- ſtances; and from tablets, as not needing the decoction or other preparation of ſugar, in order to their formation; that is in their excipient chiefly. Vide *Gaub.* à p. 98 ad 105. " Paſtilli hæc ratio eſt, arida medicamenta contrita, " humori non pingui, ut vino vel aceto coguntur, & rurſus coacta inareſcunt; " atque ubi utendum eſt, ejuſdem generis humore diluuntur." *Celſus*, l. 5. c. 17. p. 249. Vide *Le Clerc's Hiſt.* p. 215, 605, 615.

5. *Tabellæ*, *Morſuli*, *Electuaria ſolida*, called ſometimes *Teſſellæ*, *Lozengæ*, &c. (α) are formed of ſugar mixed or impregnated with the virtues of powders, ſyrups, electuaries, eſſential oils, &c. *Gaubius*, p. 112. diſtinguiſhes between Tabellæ & Rotulæ ſive Orbiculi, although the excipient is the ſame; but he owns that the " differentia niſi levis eſt." (β) The ſugar is diſſolved in water, (N. B. Saccharum roſatum is ordered in the *Cod. Med.* p. 105.) boiled, clari- fied, and evaporated to a proper conſiſtence; ſo that, when mixed with the other ingredients, it may be ſolid when cold. (γ) The ſugar may be to the ſpecies as four to one in cathartic tablets; and as eight, ten, or twelve to one in ſuch as are alterative: as the quantity of either to be made at a time cannot well be leſs than ℥iv, and ſeldom need exceed ℥xij. (δ) Mineral acids would hinder the ſugars from being tabulated; and vegetable acids require a particular encheireſis: all ſalts are unfit for this form. Eſſential oils do better

when

when rubbed on the formed tablets than when mixed over the fire: you may alſo perfume or gild them, as you pleaſe. (ε). The whole, being well mixed and of a right conſiſtence, is poured into moulds or boxes, or on a plain ſurface properly oiled, to cool, and be cut or broken, when cold, at pleaſure; or, while warm and ſoft, it may be wrought or twiſted into any figure; which has, without any neceſſity, procured this formula a variety of names, as pandaleon, penidium, paſta regia, manus Chriſti, &c. "Figuram alii aliam huic maſſæ "conciliant; vel enim gelaſcentem, pyxidi infundunt, hujus ut figuram in- "dunt, pandaleon tunc dicta: vel & totam ſimul, aut per partes, ſuper pla- "num effuſam ſcindunt, finguntve in maſſulas quadratas, quadrato-oblongas, "rhomboïdeas, &c. quas morſulos, tabellas, teſſellas, lozangias, &c. ad- "pellant; licet ſatius foret unicum morſulorum, vel tabularum nomen, ex- "terminatis reliquis, conſtanter adoptare." *Gaub.* § 190. p. 107. Ought not, for the ſame reaſon, the names rotulæ & orbiculi to be exterminated, or confined to trochiſci, with which they agree in ſignification as well as figure? "Nota. Saccharata reliqua, olim inter medicos uſitata paſtam regiam, maſ- "ſam panis, pineolatum, muſtaceum, buccellatum, &c. quid opus comme- "morare? Cum e pharmacopoliis hodie relegata, ad ciſtores dulciarios tranſ- "ierint." *Gaub.* p. 117. (ζ) The form of them may be left to the apothecary; but in cathartic tablets at leaſt the quantity of each ought to be determined: *e. g.* F. Tabellæ ʒj, ʒij Singulæ.

There are in *Ph. Edinb. edit.* 1744. Saccharum hordeatum ſive Penidiatum, Saccharum roſatum, & Tabellæ Diatragacanthi, all Tablets, if the laſt deſerves to be ſo called; the Trochiſci de Terra Japonica being as properly Tablets as they are. In the *New Lond. Diſp.* the Saccharum roſaceum is ſuch Tablets as our Tabellæ Diatragacanthi, but made without heat, and without diſſolving all the ſugar. But the Tabellæ cardialgicæ will paſs for Tablets no-where, if any diſtinction is to be made between Tablets and Troches: which however the authors ſeem to admit of; the title of this ſection being Trochiſci & Tabellæ, which otherwiſe ſhould have been Trochiſci *aut* Tabellæ.

SECT. VIII.

All the uſual liquid forms of medicines may be comprehended under the names *Mixtura*, *Julapium* ſive *Julepus*, *Emulſio* ſive *Emulſum*, *Infuſio* ſive *Infuſum*, and *Decoctum* ſive *Apozema:* of which in order.

1. (α) *Mixtura*, a *Mixture*, is a liquid medicine compoſed of different fluids, or of ſoft ſubſtances, with or without powders, mixed in ſuch proportion as not to diminiſh too much its fluidity, or to make it too diſagreeably thick. And for the moſt part it is little elſe than a powder in a proper vehicle. (β) The excipient or liquid may be water ſimple or diſtilled, infuſions, decoctions, wines, &c. and the other ingredients, almoſt any that can be for a little while ſuſpended in the liquid, if finely powdered. (γ) Liquidi ʒj admits eaſily pulveris ʒß; but more if deſigned for external uſe. For gargariſmi, liquida epithemata, collyria, errhina, &c. are commonly Miſturæ.

2. *Julapium* ſive *Julepus*, a *Julep*, is ſaid to come from a Perſian word Juleb, or Julep, ſignifying a potio dulcis. "Arabibus vox Julebi à ſyrupis non diſtin-

" distinguitur." *Blanc. Lex.* 363. " Cæterum ignorare minime decet quod " ex iis quæ ingeruntur, alia trita solum, ac in levorem redacta exhibemus: " alia liquore quopiam idoneo subigimus, & vel plana fingentes in circuli " figuram efformamus, quæ τροχισκους nuncupamus: vel in exiguos globulos " cogimus, & a deglutiendo καταποτια appellamus: aut aqua decoquentes ad " tertias & colantes, eum tantum liquorem jam medicamentosum usurpamus: " aut cum altero quopiam, puta vino, melle, sapa, vel ejusmodi alio conjuncta " propinamus; aut quod proportione iis respondet σακχαρ, vel mel, prout " expedire arbitramur, denuo cum medicamento, quousque concreverit, ac " constiterit, coquimus, & σερапιον, vel ζυλαπιον, nominamus. Quin & alia " conficimus, &c." *Actuarius*, l. 5. c. 1. col. 249. It is written Julepum in the *Lond. Disp.* A Julep is a clear transparent (like crystal) or a beautiful red or blue coloured mixture, of a pleasant taste and smell, composed of distilled waters, tinctures, syrups, &c. sometimes acidulated ad gratiam. More than a pound is not commonly ordered, nor less than half a pound: and sacchari ʒj, or ʒij generally is enough to sweeten ℥j of the waters. There are three Julepa, or rather one, in *Ph. Lond.*

" Tres mixturarum species usitatæ sunt: 1. Diffusior quæ *Julapium* audit. " 2. Media, quæ propriè *mixtura* vocatur. 3. Contracta, cui nomen varium " (guttæ, haustus, tincturæ, essentiæ, spiritus, balsama, olea, liquores) ut " infra patebit. . . Julapium, julepus recentiorum est mixturæ species dilutis- " sima, ferè diaphana, ex sapore, odore, colore jucundioribus, conflata. Po- " tum hinc suavem exhibens, pluribus dosibus destinatum. Veterum ergo " julepus, qui dilutior syrupus est, a nostro discrepat spissitate." Vide *Gaub.* p. 180 ad 209.

3. *Emulsio*, *Emulsum*, an *Emulsion*, is an artificial milk, made commonly of oily farinaceous seeds, rubbed with water in a mortar. The semina quatuor frigida majora & minora, semina cardui Mariæ, bardanæ, carthami, amygdala dulcia, nuclei pini, &c. elæosacchara, balsamosacchara, gummi-resinæ, olea, and balsama, dissolved in vitello ovi, &c. with common or distilled waters, decoctions, &c. may be made into emulsions, and answer various intentions: but are most used as a diluent antacrid drink. (α) Whatever spoils the colour, consistence, or taste of this formula are to be excluded; as pistachia, coloured syrups, acids, semen psyllii, sinapi, spiritus urinosi, & similia. (β) For diluent Emulsions sem. ʒvj, vel ℥j is enough for aquæ ℔j; which may be aromatised, and sweetened pro re nata. Nutritive, or otherwise medicated, Emulsions may be much thicker. " ℞ avenæ excorticatæ ℥iij. F. " cum aquæ q. s. Emulsio, cujus ℔iß. admisce nitri puri ʒß, syrup. viola- " rum ℥j, aceti squillit. ʒij. (*Boerh. Lib. de M. M.*) p. 51.) S. utatur pro potu " familiari." *Gaub.* p. 176: who there calls it Emulsio antialcalina: though it is not properly an emulsion. . . . " Spissiora fiunt si menstrui ad materiem " emulgendam proportio tripla, quadrupla, quintupla est: dilutissima si duo- " decupla ad vigecuplam usque: media si octupla." *Gaub.* 173. (γ) No more should be ordered at a time than is to be consumed in a day, especially in summer, because the common Emulsions (at least) soon grow sour, and spoil. So that less than ℔j is too little, and more than ℔ij or ℔iv generally too much.

4. *Infuſio*, *Infuſus*, ſive *Infuſum*, an Infuſion, is a liquid impregnated with ſuch parts of any ſubſtance, macerated in it, as it can diſſolve without boiling. The liquids are either aqueous, vinous, or ſpirituous; and are ſometimes aſſiſted by ſalts to increaſe their diſſolving powers, as menſtruums. Minerals, animals, but eſpecially vegetables, afford plenty of materials for infuſions. For the doctrine of menſtruums, vide *Boerh. Chem.* i. p. 669 ad 848. I need not tell you how many aqueous, vinous, and ſpirituous fluids there are; neither how many ſimples will yield ſomewhat to each of them; but only obſerve a few things in general. And (α) although the proportion of the menſtruum to the materials muſt vary according to their nature, as well as the deſign of the infuſion, yet generally the liquor to be ſtrained ſhould be at leaſt quadruple, or rather octuple the weight of the ſubſtances infuſed. Authors tell us that three, four, five, ſix, eight, or ten times as much liquid muſt be taken, as of materials; although many dry vegetables will abſorb triple or quadruple their own weight of the liquid; whilſt many alſo will impregnate eight times their own weight of a fluid, as much as they can do half that quantity. Thus ſennæ ʒij will impregnate aquæ ℥iv. as ſtrongly as if twice the quantity were infuſed, becauſe the water will bear no more of the purgative parts of that body, as *Dr. Grew* obſerves, (*vide* gratiola, antimonium, &c.) So for vegetable cathartic Infuſions, one part of materials may generally ſuffice for ten or twelve parts of liquid. But in alterative Infuſions, or in ſuch as are both alterative and cathartic, the uſe whereof is to be continued for ſome time, the ingredients may be to the liquid, or menſtruum, as one to thirty, fifty, or a hundred. "Quod ſi infuſum, non medicamenti, ſed potius poti medicati, quo ordinarie "uti liceat, rationem habere debeat, quantitas infundendorum diminuenda eſt "magis, ita ut ſapor quidem aliqualis medicatus percipiatur, is tamen neuti- "quam prædominetur, nec potus gratiam ſuam perdat. . . Licet vero nec hic "proportio ſtrictè determinari queat, vix tamen erraverimus, ſi ad rerum in- "fundendarum partem unam aſſumamus liquidi (vini *ſcil.* aut cerviſiæ fer- "mentantis) partes ducentas." *Balthaſ.* p. 128. — (β) The doſe of purgatives in infuſion is generally allowed to be double that of the ſubſtance; which cannot be admitted if they are infuſed in a proper quantity of a right menſtruum. And probably this has been made a rule, becauſe it has been the practice, either to take a wrong menſtruum, or too ſmall a proportion of it, or infuſe for too ſhort a time; or becauſe there is ſomething in the nature of the cathartic which may may make it adhere too long to the inteſtines, or irritate more than the Infuſion would do. *Vide* Agaricum, Colocynth, Antimon. *Mr. Bolduc* ſays rhabarb. pulv. ʒj purges more than the Infuſion of ʒiß. *Mem. Acad.* 1710. But I have known the Infuſion ſennæ vel rhabarbari ʒj, yea ʒß, purge plentifully. See alſo Ptiſana cathartica, *Ph. Bateanæ.* Purgatives muſt be diſſolved, in part at leaſt, before they begin to operate: hence it is that Infuſions ſooner begin to purge, while the ſubſtance may continue the operation longer. The doſe therefore of cathartic Infuſions need not exceed the doſe in ſubſtance: that is *ex. gr.* the Infuſion rhabarb. ʒj, if rightly made, will purge as well as the ſame quantity in ſubſtance, though perhaps the operation may be ſooner over: but of alterative and cathartic Infuſions, or purgative diet-drinks, the $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, doſis communis is ſufficient, according to the time the uſe of them is to be continued. "Folia, herbæ, flores hic ſæpe ad mani-

"pulos

" pulos vel pugillos; fructus ad numerum præſcribuntur: emetica tamen &
" purgantia pondere determinanda ſunt. Aſari ſaltem folia exceperis, quæ
" numero frequentius præſtituuntur." *Gaub.* p. 124. β. An unwarrantable exception, as is obſerved above. *Vide* Aſarum. — (γ) Nor is the menſtruum to be diſregarded in determining the doſes of Infuſions. Aquæ ℥viij can be taken in a morning with more eaſe than vini ℥iv, or aquæ vitæ ℥ij. Infuſi aquoſi ℥iv, vinoſi ℥ij, ſpirituoſi tenuioris ℥j, need ſeldom be exceeded at a time; but may be repeated once or twice a day if need be. " Aquoſa fere ab ℥j ad
" iij, v, vj; vinoſa à ʒß ad j, ij, iv; ſpirituoſa à ʒij ad ʒß, j, ij, exhibentur.
" *N.* Materiem utplurimum duplo, triplo, imo & quadruplo, majore quan-
" titate pro doſi exhiberi in Infuſo, quam in ſubſtantia, ut vocant: prout ni-
" mirum virtus per minus majuſve volumen eſt diffuſa, aut tota, vel ſaltem
" ex parte, adhibito menſtruo elici valet." *Gaub.* § 215. p. 122 & p. 124. α. This may be true of alteratives, whoſe doſe is determined by bulk, or which contain little medicinal or uſeful in a great deal of uſeleſs ſubſtance: but it is not ſo in purgatives, & ſimilibus. — (δ) If the menſtruum is ſpirit, the infuſion is called commonly *tinctura*; if wine, *vinum*; and if water, *infuſum:* but if one doſe only is deſigned, *hauſtus*, or *potio*. " Si vero lac, ſerum lactis,
" vinum, cereviſia, hydromel, &c. pro menſtruis adhibita ſunt, ab his nomen
" accipit formula. Si tandem materiem dant aromata; menſtruum aquæ ſtil-
" latitiæ aromaticæ, aut vinum vel ſpiritus vini, ſaccharique multum accedit,
" & depuratio limpidiſſimæ, *clareti* vel *nectaris* dari ſolet nomen: ſigillatim
" tamen *vinum Hippocraticum* dicitur, ſi baſin aromatum conſtituit cinnamo-
" mum, & pro menſtruo vinum eſt." *Gaub.* p. 130. *De Infuſis Tractat.* a p. 118 ad 134: where you have a great many ſpecimens.

5. *Decoctum*, *Apozema*, a *Decoction*, differs from an Infuſion only in the materials being boiled in the menſtruum. Hence ſuch ſubſtances only, as do not ſo well, or ſo ſoon, yield their virtues to their proper menſtruum by infuſion, need or ought to be decocted; and ſuch menſtruums only are proper which boiling does not ſpoil. Wherefore (α) diſtilled waters, wines, ſpirits, are not proper menſtruums, unleſs the decoction be made in cloſe veſſels, or continued a very ſhort time. Neither are aromatica & acria volatilia proper materials. (β) The boiling is to be continued for a longer or ſhorter time, according to the nature of the materials; and not in proportion to their ſolidity or laxity, hardneſs or ſoftneſs: for China and Sarſa bear as much boilng as Guajacum. Knowledge of the ſimples is the beſt directory in this caſe. You have *Gaubius*'s general rules, § 227. p. 142. α—ζ: according to which ſome ſubſtances require to be boiled for ſix hours and more, others only for a quarter of an hour.
" Aſarum coctum magis diureticum, quam emeticum eſt. Liquoritia diu
" cocta amareſcit. . . Rheum, myrobalani, &c. diutius cocta, vi purganti ad-
" ſtringentem jungunt. Mucilaginoſa, rad. ſymphyti, althææ, malvæ . . . .
" coctione longa lentorem inferunt liquori injucundum, &c. *Gaub.* p. 140. π. ρ. (minus accuratè) (γ) The proportion the liquor ſhould bear to the ſubſtances decocted is the ſame as for infuſions, regard being had to the waſte in boiling: as is alſo the doſe. It is ſometimes convenient to clarify the decoction with the whites of eggs, ſweeten and aromatiſe it by infuſion, &c. " Decoctum
" ad doſin unicam præſcriptum vocatur *hauſtus* vel *potio*; ad plures, ſi men-
" ſtruum ſpirituoſum eſt, *tinctura*; ſi aquoſum, *decoctum* vel *apozema*; ſi ani-

" malium partes baſin materiæ conſtituunt, *jus* vel *juſculum*; ſi materies ſemel " decocta cum recente aqua iterum coquitur, *bochetum* vel *decoctum ſecunda-* " *rium*. Reliquæ denominationes hodie fere exoluerunt." *Gaub.* p. 149. He might have added the modern *ptiſana*, or *ptiſſana*, one of the moſt common decoctions. " Galen in one place ſpeaks of boiled water, which they cooled " in ſnow, and was called in Latin decocta, and δεκοκτα alſo in Greek; whe- " ther in imitation of the Latin, or for want of a more proper name." *Le Clerc Hiſt.* p. 606. And *N. B.* hæc eſt Neronis decocta. Vide *Galen Meth. Med.* l. 7.

To decoctions may be referred *hydromel*, *oxymel*, and *clyſteres*. 1. *Hydromel* is either *aquoſum* or *vinoſum*; and each of theſe *ſimplex* vel *compoſitum* ſeu *medicatum*. (α) Hydromel aquoſum is mellis p. i. & aquæ p. viij, x, vel xij, mixed and decocted, and ſkimmed ſo long as it foams, or to the conſumption of a fourth part. (β) Hydromel vinoſum is mellis p. j. & aquæ p. iv. decocted till an egg ſwims in it, clarified, ſkimmed, and fermented. Some uſe more water. (γ) Either of theſe may be impregnated with the virtues of other medicines, by infuſion or decoction. — 2. Oxymel is mellis p. ij. & aceti p. j. decocted and ſkimmed till it attain the conſiſtence of a ſyrup. If acetum ſcillatum be taken in place of common vinegar it makes the *oxymel ſcillatum*, (barbarè *ſcilliticum*); only the quantity of honey may be a little leſs. It is mellis p. iij. pro aceti ſcill. p. ij. in *Pharm. Ed.* where you have alſo an *oxy-ſaccharum ſcillatum* (or *ſyrupus ſcilliticus*) which takes aceti p. ij. pro ſacchari p. iv. (nonne potius āā p. æ?) for ſuch as cannot bear honey. — 3. Clyſteres, Clyſtera, κλυσματα, κλυσμοι (à κλυζω, lavo) & Enemata, Clyſters or Glyſters. This is a very ancient remedy: and was not only uſed by *Hippocrates*; but alſo the Glyſter-pipe is accurately deſcribed by him, *L. de ſterilibus*, *Ed. Foeſ.* p. 680. lin. 19. where the inſtrument, not the injection, is called κλυστηρ. The Ibis, an Egyptian bird, is ſaid firſt to have taught the uſe of clyſters. " Roſtri aduncitate per eam partem ſe proluens, qua reddi ciborum onera " maxime ſalubre eſt." *Plin.* l. 8. c. 27. p. 187. Though *Paracelſus* fooliſh-ly calls it turpiſſimum medicamentum, and *Helmont* pudendum medicorum ſub-ſidium. A *Ruſſian nobleman* certainly played the fool, when he choſe rather to die than receive one. Vide *Wedel. De Medic. comp. extemp.* § 2. c. 5. p. 82. — As to this form of medicine I ſhall only obſerve: (α) That a pound is com-monly a doſe for a man: which proportion ſhould be obſerved for different ages; except children are commonly allowed a greater quantity of a mild clyſter rather than a leſs of a purgative one. " Ratione ætatis hæc fere regula obtinet; " infanti recens nato conveniunt ʒij: provectiori ʒiij, vel iv: puero ʒvj, vel " vij: adulto ʒviij, x, vel xij, ratione conſtitutionis ægri; proceri plus ferunt; " parvuli minus: &c." *Gaub.* p. 372. But, I think, the rules given above for the regulation of doſes preferable to theſe of Gaubius: *provectior* is a *vague* age; and a clyſter, if too ſmall, may be (after the firſt is rejected) repeated, or quickened by a ſuppoſitory, which admits of a double doſe of purgatives. (β) Clyſters ſhould be injected always blood warm. " Frigida enim omnia " inteſtinis ſunt inimica, eaque facile lædunt, cujus triſte exemplum memini " contigiſſe in infante ſereniſſimo, cui cum, pharmacopœi neglectu an culpâ, " clyſter actu frigidus applicatus eſſet, brevi poſt convulſus obiit." *Wedel. comp. med. extemp.* Sect. 2. c. 5. p. 92. They ſhould not be injected with too much violence, nor loaded with large quantities of narcotics, or ſtrong cathartics,

which operate ἄνω aut κατω. " Sennertus afferit opiata, in ſummo virium " lapſu, tutius clyſteribus quam per os infundi; verum nos potius dicimus, " opiata tutius interius, quam in clyſteribus adſumi. Certior enim inde ſpe- " rari poteſt & tutior efficacia. . . Notum eſt exemplum Salmuthi, cent. 2. " obſ. 97. quendam ob opium in clyſtere receptum ad ʒj, in coma incidiſſe." *Wedel.* l. c. p. 88. " Ab opii gr. iv. clyſmati additis, æternum dormiviſſe " viſus eſt æger." *Gaub.* p. 374. Both the doſes are too large; though the laſt could ſcarce have had ſuch fatal effects taken by the mouth. (γ) It is controverted whether one can be nouriſhed by clyſters: but the affirmative ſeems pretty evident. " Parum fidæ & perfectæ nutritionis inde ſperare licet, " ubi ex cloaca facienda eſt culina." *Wedel.* l. c. p. 94. " Vim nutrientem " qui clyſmatibus negant; neſcire videntur antedicta (de opio). Quin & lac- " tea, in colo hominis, chylo repleta, demonſtravit *Cl. Winſlow.* A vino, ſpi- " ritu vini, etiam parciore copia, clyſmatis ſpecie injecta, nata temulentia, &c." *Gaub.* p. 377: as it is alſo whether it is better to receive it lying on the right or on the left ſide; which laſt I would prefer, were it of any conſequence. *Gaubius*, p. 376, is for the right ſide.

SECT. IX.

It remains only that I ſay ſomewhat of *Cataplaſms*, *Liniments*, *Ointments*, *Cerots*, and *Plaiſters*, in order principally to fix the conſiſtence of the four laſt, in which authors commonly take an unbounded and ſo an unreaſonable latitude, if their names deſerve to be retained.

1. *Cataplaſma*, from καταπλασσω, illino, is of the conſiſtence of an electuary nearly, or of a poultis, and uſed outwardly only. If it be thick enough not to ſpread further than is deſigned, and ſo ſoft as not to hurt the part, it is of a right conſiſtence. " Cataplaſma eſt epithema molle, cohærens, pulti- " forme, mediæ inter unguentum & emplaſtrum conſiſtentiæ, calore non " colliqueſcens, varii uſus externi. Eſtque duplex, coctum aliud, aliud cru- " dum." *Gaub.* p. 244, (α) Every ſubſtance, whether liquid or ſolid, may make a part of this compoſition. For whatever by decoction can be reduced into a pulp . . . whatever is fit for decoction . . . . and whatever can be powdered . . . may, with the addition of water, milk, wine, &c. except oil, butter, and the like, be brought to the conſiſtence of a cataplaſm. (β) Yet, to prevent the too ſoon hardening of a cataplaſm, a ſmall proportion of oil, butter, ointment, &c. is conveniently added. The quantity to be made at a time muſt be determined by the frequency of its uſe, and the ſize of the part to which it is to be applied. Gaubius treats of *Cataplaſms* à p. 244 ad p. 260; and of *Balnea humida* ac *vaporoſa*, & *ſuffitus*, à p. 261 ad 287 incluſive.

2. *Linimenta*, *Unguenta*, *Cerata*, & *Emplaſtra*, differing almoſt only in conſiſtence, I ſhall conjoin them. (α) For the baſis of all theſe, or their excipient if you pleaſe rather ſo to call it, oily or reſinous ſubſtances are in common uſe; except it be for the Unguentum Ægyptiacum, which therefore, perhaps, is improperly called an ointment. And they are either *liquida*, as olea, axungia, butyrum, and whatever the heat of one's body melts; *tenaciora*, as terebinthinæ, balſama, &c. or *ſicca*, as cera, reſinæ, gummi reſinæ, &c. To theſe may

may be added juices, wine, vinegar, mucilages, ſoaps, extracts, powders, metallic calces, &c. in a due proportion: though they are by no means neceſſary to the conſiſtence of any of theſe four formulæ. (β) Now ſince no plaiſter need be ſo hard as common reſina alba, and no liniment is ſo fluid as oil; of theſe two, differently proportioned, may be made a liniment, ointment, cerat, and plaiſter, without any thing elſe. And ſince a good ointment may be as much thicker than oil as a plaiſter is thicker than an ointment, and a liniment as much thinner than an ointment as a cerat is thicker, a cerat being of a conſiſtence between an ointment and a plaiſter, as a liniment is between an ointment and oil, dabunt

Reſinæ p. j. & olei p. viij. *Linimentum:*
Reſinæ p. j. — olei p. iv. . *Unguentum:*
Reſinæ p. j. — olei p. ij. . *Ceratum:* and
Reſinæ p. j. — olei p. j. . *Emplaſtrum.*

If powders are added, the oil muſt be proportionably increaſed, and regard alſo had to ſuch ſubſtances as act like menſtruums on one another, as well as allowance made for a reaſonable latitude in the conſiſtence of each of theſe forms. But as there is ſeldom occaſion in extemporaneous preſcription to order new plaiſters, &c. and the preparation of the officinal kinds are among the firſt things taught in the ſhops, I ſhall ſay no more about them: you will find *Gaubius* prolix enough on them; as alſo on *balſama vulneraria* & *odorata*, *epiſpaſtica*, & *fricia* or *fricatoria* (two words of his own making I believe); as on his other *formulæ externæ*, to which I refer you.

" Pro diverſo emplaſtri uſu triplicem obtinet ſpiſſitatis gradum, molliorem " nempe ad cerata accedentem, medium, & duriorem. Emollientibus, altum " penetraturis, ad mobiles partium flexuris applicandis ſparadrapis, prior ma- " gis convenit: exſiccantibus, adſtringentibus, firmantibus, &c. bini poſte- " riores. Proportio hinc pro variâ ſpiſſitate, ita fere determinatur, ut ſint pro

Molli	Olei ℥j. . . Ceræ . .	Uncia j.	Pulver.	℥ß.
Media		Uncia iß.		Drach. vj.
Duriore		Uncia ij.		℥j.

Gaub. p. 293.

" Ceratum, Cerotum, Cerelæum, eſt emplaſtrum mollius, mediæ fere inter " emplaſtrum & unguentum ſpiſſitatis. . . Proportio mutua ingredientium ſola " diſcrepat; quippe quæ talis eſt, ut olei ℥j recipiat ceræ ℥ß, pulverum ʒj, ʒiß, " pro ponderis ſpecifici varietate: aut & omiſſo pulvere ceræ ʒv." *Id.* p. 301.

" Unguentum eſt medicamentum externum, cerato mollius, mellis fere aut " electuarii conſiſtentia, calore liqueſcens, ex pinguibus maxime conſtans . . . " olei ℥j cum ceræ, aut hujus analogorum ʒij, ʒiij, unguentum conſtituit. " His ſi pulverem addis, ceram pro rata minue, ut hujus ſint ʒij, illius ʒj, ʒiß, " aut quantitate pulveris definita, ceræ q. ſ. adde." *Id.* p. 304, 308.

" Linimentum, litus, eſt Unguentum mollius, mediæ fere inter oleum & " unguentum ſpiſſitatis, illitu efficax. . . Proportio ingredientium mutua, ob " conſiſtentiæ varietatem, admodum vaga eſt. . Vix peccatur exceſſu tenuita- " tis, at omnino ſpiſſitatis. . . . Litus acquiritur ex olei ℥j, & ceræ ʒj." &c. *Id.* p. 324.

Wax

Wax being of the conſiſtence of a common plaiſter, I have choſen rather reſina flava; which, being friable, may be compared to powders; and ſo ought to be diminiſhed, quantity for quantity, when powders are taken. There have been unguenta potabilia, or for inward uſe, and ſuch is the *balſ. Locatelli.*

Thus I have finiſhed my Lectures on Medicinal Simples. What I had principally in view, in compoſing them, was to diſcover and correct the numerous errors concerning the *M. M.* ſuch eſpecially as relate to their uſe in medicine. Theſe *ſilvæ ſimplicium*, or *horti medici*, are ſtill over-run with weeds; ſo that it is one of the moſt difficult problems in phyſic, how to diſtinguiſh between the ſpurious and genuine virtues of ſimples. And how little has been done, even to this day, in order to a due ſolution of it, is too evident from the fate even of the moſt modern diſpenſatories, and precarious practice of phyſicians. A *Dr. P.* can condemn a ſimple one year, after he has ten years uſed it without any ſucceſs: a *Dr. Cl.* reject another as noxious, after conſuming great quantities of it in upwards of forty years practice! How often are the compoſitions of the ſhops altered! How ſeldom bettered! How often do even graduates preſcribe what they never ſaw, and know nothing of! "I "am informed (ſays a learned *London phyſician*) by a friend to the grandee of "the faculty, that he has got above 50000 pounds by preſcribing Gaſcoign's "powder; though I am perſuaded, that, if you aſked him what are the in-"gredients it contains, he would not be able to tell." One who flouriſhed nearer ourſelves had the aſſurance to declare, that a phyſician was no more concerned to know what opium is, or how prepared, than a lady is to know how her chocolate is made, and where; and at the ſame time pretended to account for all its real effects from one merely accidental. What improvement can be expected from ſuch practitioners? Surely every judicious phyſician does and muſt regret the little attention given to the Materia Medica to this very day.

"Fateri enim debemus, illam partem medicinæ quæ de viribus & uſu "medicamentorum agit, minus reliquis excultam eſſe. Eædem vires, quæ "apud Dioſcoridem, Plinium, Galenum leguntur, adhuc tribuuntur plantis "ejuſdem nominis. Laudabili induſtria botanici quæſiverunt, ut plantas a "veteribus memoratas cognoſcerent, taleſque characteres deſignarent, quibus "ſera poſteritas illas ab omnibus aliis poteſt diſtinguere. Verum nondum "ſatis indagatum fuit, ſedulâ obſervatione, an vires his plantis adſcriptæ "certo effectu ſe manifeſtarent. Quantum autem utilitatis caperet ars medica, "ſi ſevero & prudenti ſcrutinio, expungerentur omnia quæ falſa vel dubia "de medicamentorum viribus leguntur. Si unuſquiſque qui medicinæ ope-"ram dat, toto vitæ curriculo, vel unam plantulam omnibus modis exami-"naſſet, ut diſceret illius uſum verum, jamdudum exhauſtus fuiſſet ille labor, "& plura haberemus remedia cognita, quibus certo & tuto confidere poſſe-"mus." *Van Swieten in Aphor. Boerh.* 1147.

Thus to examine (even all) the medicinal ſimples has employed moſt of my time for more than forty years, even preferably to the more beneficial practice of phyſic, becauſe I thought I could thus, conſidering my ſtation, be more ſerviceable to mankind. And I have the vanity to think that I have done as much, if not more, than any one has done; nay even more than has been done hither-

to, towards cleanſing this Augeæ ſtabulum, the Materia Medica, of its droſs and filth. In order to which,

I ſoon found myſelf obliged to depend more on experiments than on authorities, how great ſoever; and freely, though modeſtly, to cenſure not a few of the generally received opinions, even though ſupported by the greateſt characters of our profeſſion; but never without giving ſuch reaſons as to myſelf appeared convincing: I even never ſcrupled "to quote paſſages with a view to "criticiſe on or condemn them," however much it might give offence, or expoſe me to cenſure. (vide *Dr. Munro*'s Anatomy of the Bones, Pref. p. iv.) Truth ought to be the only aim in every controverſy; and, if that be on my ſide, I regard not cenſure; if not, I ſhall reckon myſelf obliged, ſingularly obliged, to every one who diſcovers my miſtakes, and will ſet me right; and cannot think that I thereby give occaſion to uſeleſs wrangling, but rather excite to the finding out of the truth, and conſequently contribute to the public advantage.—I have alſo been always careful never to arrogate to myſelf what I learned from others, but candidly owned to whom I have been obliged; a practice not very common at this day. Do not we ſee many treatiſes filled up, as it were, with what their authors have ſtolen from others, without naming them; claiming diſcoveries they never made, and pluming themſelves with borrowed feathers. I always thought it a principal part of a *Profeſſor*'s office to direct ſtudents how and what authors they ought to read, which cannot be done without characteriſing them; for otherwiſe they may read their eyes out, and be little wiſer than when they began, the world is ſo ſtocked with books not worth the reading. Certain it is, however, that the *M. M.* is, in the practice of phyſic, of more univerſal and general uſe than any other part of medicine; and at the ſame time a long ſtudy: ſo that thoſe who neglect it in their youth have reaſon all their life to regret it. For although you were perfectly maſters of all the other parts of medicine, if you are defective in this you can be of no ſervice to your patients, and even of little uſe to yourſelves. For though you could never ſo learnedly talk or write about the cauſes, ſymptoms, &c. of the ſcurvy or gout, to what purpoſe will all this be, if you do no more? One, though ignorant of theſe, who puts his patients on drinking lime-water, does them infinitely more ſervice, if they be cured by it. Yet ſtill the *M. M.* is neglected; and many phyſicians go on blundering in their old way, preſcribing at random, and furniſhing plenty of materials for ridiculing the profeſſion. If the patient die, it is of the diſeaſe; though it might rather be ſaid of the doctor: if he recovers, the doctor has the praiſe, though the recovery was frequently owing intirely to nature.

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